Technical Tests Questions
Contents

Code	Category
A41	Loader Compressor
A42	Crusher
A43	Screener
A42 & A43	Crusher & Screener
A44	Concrete Pump – Trailer Mounted
A45	Piling Rig – Driven below 15 tonnes
A46	Piling Rig – Driven above 15 tonnes
A47	Piling Rig – Bored below 15 tonnes
A48	Piling Rig – Bored above 15 tonnes
A49	Loader/Securer – Non-STGO
A50	Loader/Securer STGO
A56	Dump Truck – Articulated Chassis
A57	Dump Truck – Rigid Chassis
A58	Excavator 360° below 10 tonnes Inc. Lifting Operations
A58	Excavator 360° below 10 tonnes – Lifting Operations only
A59	Excavator 360° above 10 tonnes Inc. Lifting Operations
A59	Excavator 360° above 10 tonnes – Lifting Operations only
A60	Mobile Crane
A61	Appointed Person – Lifting Operations
A62	Crane/Lifting Operations Supervisor
A63	Pedestrian Operated Tower Crane
A66	Compact Crane
A67	Tunnelling Locomotive
A68	Plant Driving
A71	Soil Stabiliser
A72	Stationary Concrete Placing Boom
D90	Demolition Plant
D91	Demolition Plant – Pedestrian Operated
D92	Demolition Plant – Skid Steer Tool Carrier

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How can I find out the answers to the CPCS Test Questions?

Many of the questions within the theory test were derived from publically available sources, and these sources of information can provide leads to the typical answers. In the main, most publically and easily available information is through the internet. Written publications, being specialist in nature, are generally harder to source although specialist trade and plant specific magazines do exist. Internet search engines such as Google, Bing etc. are a better way of seeking out technical and operating information relating to relevant categories of plant. The following links are purely to provide a signpost to possible sources of information.

Many construction contractors, Federations and Organisations post plant-based best practice guidance or information documents on their websites. The Construction Plant-hire Association have developed best practice guides to a range of categories or activities which can be viewed and downloaded from www.cpa.uk.net

Information relating to MEWPS can be viewed at www.ipaf.com whilst technical information relating to lorry loaders can be viewed at www.allmi.com. Those working in specialist areas such as piling may find applicable information at www.fps.org.uk and those in demolition can find relevant information at www.demolition-nfdc.com

Many machinery manufacturers and importers allow technical details and operator's manuals to be viewed and downloaded. Again, internet search engines provide the requisite links. A list of plant and equipment manufacturers can be viewed on the web pages of the Construction Equipment Association at www.coneq.org.uk Encyclopaedia-type website such as Wikipedia at www.wikipedia.org can provide relating specialist information.

Other sources of information include The Health and Safety Executive at www.hse.gov.uk where information leaflets and reference documents such as Codes of Practice can be viewed and downloaded free of charge. The HSE also post information relating to incidents involving plant. Information relating to the driving of plant on the highway can be sourced from Government websites (www.direct.gov.uk/en/Motoring).

Some plant blogs for specialist areas such as lifting do exist where good practice can be shared by others.

Alternatively, CPCS Test Centres can provide training or updating programmes that focus on the topic areas covered by the questions.

Official answers to questions are confidential and restricted to approved Test Centres and CPCS constantly reviews and updates questions. CPCS has no involvement with, and cannot confirm the accuracy of, answers to CPCS Theory Test questions that appear on auction-type websites or other sources that advertise the answers to questions.

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Loader Compressor A41
Technical Test Theory Questions

What is the definition of, or how can a hazard be described?
What is the purpose of a risk assessment?
List SIX typical subject areas that should be covered in a site induction.
What THREE main duties of The Health and Safety at Work Act must employees follow?
What does The Health and Safety at Work Act require employers to do with regards specifically to plant?
a) What is the purpose of a Method Statement and b) what is required of the operator?
Name FOUR different types or levels of disciplinary actions or sanctions that can be applied (by employers and judicial bodies) to operators of plant who do not comply with, or follow legislation and regulations.
Why are plant operators generally regarded as 'safety-critical' workers?
Name THREE ways in which an operator can minimise their impact upon the environment whilst using the machine.
In what situation does a hard hat NOT need to be worn when operating a loader compressor?
The operator has to fit and use a new bucket using a quick-hitch coupler that they are unfamiliar with. What do Regulations (i.e. PUWER 98) and other guidance require the operator to have?
What are the possible outcomes of facing prosecution for not complying with legislation and regulations?
How can a qualification or card benefit a plant operator?
Name THREE ways that a plant operator can contribute in ensuring repeat business with the client or principal contractor.
Where should the machine's Operator's Manual be kept and why?

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Loader Compressor A41
Technical Test Theory Questions

If the operator has to refill the fuel tank, state TWO precautions to ensure cleanliness of the system.
What is the purpose of a roll or ROPS frame?
Using the Operator's Manual, state the figure for the tyres' operating pressure. **Note**: The Operator's Manual for the machine being used for the test MUST be available for reference by the candidate.
Using the Operator's Manual, state the cold-starting procedure for the machine. **Note**: The Operator's Manual for the machine being used for the test MUST be available for reference by the candidate.
What is a possible consequence of using a tyre with a deep cut in the sidewall?
If checking the oil level using a dipstick, why must gloves be worn?
How is a compressor output calculated?
What is the typical working pressure of an air-operated breaker?
Apart from the operator, who else may need to use the machine's Operator's Manual?
When air is compressed, what fluid is produced?
What is the purpose of the compressor's pressure relieve valve?
During work, the engine starts to overheat. Explain the danger if someone tries to remove the radiator or expansion tank cap.
An operator has to travel the machine on the public highway. List SIX requirements that must be followed.
If the loader compressor is being travelled or working on the public highway, including adjacent pavement and verges, The Road Traffic Act applies. a) What type of licence and which classes should the operator hold and b) what is the minimum age allowed?
Name THREE conditions that mirrors must be in, on the machine.

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Why must the seat belt be worn, even with the cab door closed?
What problems and hazards can soft ground cause to a loaded loader compressor?
Give FOUR reasons that may cause the loader compressor to tip over sideways.
Whenever possible, who should decide the positioning of a vehicle to be loaded?
Explain ALL visual checks that must be carried out on all types of quick-hitch bucket-attaching systems before use.
On a semi-automatic quick-hitch bucket-attaching system: a) what is the purpose of the safety pin and b) what checks MUST be made to the pin before use?
Why should air hosing length be kept to a minimum?
Give THREE possible reasons why loader compressors should not stray off the designated haul routes.
Describe ONE physical method of checking that the attachment is fully secured to the coupler prior to work.
a) What is meant by ‘white finger’ and b) name TWO methods of reducing the effect?
If setting up to work in a pedestrianised area, state THREE factors that need to be taken into account?
If using a compressed air tool to break up a concrete type surface, list FIVE items of PPE that must be worn.
What is regarded as the most productive position for a vehicle to be loaded to be in when being loaded from a stockpile?
Before manually changing any bucket: a) where should the bucket be positioned (in relation to the ground) before removing the final pin and b) why?
Give TWO reasons why the loader compressor operator should have an understanding of the type of material being loaded.

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Loader Compressor A41
Technical Test Theory Questions

The operator is asked to tip material into a trench. State FIVE different requirements that must be considered or implemented before tipping commences.
Who should determine the maximum load that should be placed into the body of a vehicle being loaded?
What may happen if the load is tipped onto a downward slope?
When working in a confined area or space, name THREE hazards that can occur.
a) What is the recommended minimum distance to be kept away from overhead power lines mounted on wooden poles when tipping loads and b) explain why a distance should be kept.
State TWO requirements of using a stop block or earth bank (berm) at a trench discharging point.
Before leaving the cab for a rest break, after parking and switching off the machine, what final action must be carried out?
When parking the machine at the end of the shift, name THREE places where the machine should NOT be parked.
The operator has been asked to drive the machine onto a transporter/trailer. a) Who is responsible for the loading operations and b) state FOUR actions to be considered by the operator before loading commences.
If the operator has loaded the machine onto a transporter/trailer on behalf of a driver, what checks must be carried out before they leave the cab?
Why should a loader compressor be re-fuelled at the end of the day?

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Crusher A42
Technical Test Theory Questions

What is the definition of, or how can a hazard be described?
What is the purpose of a risk assessment?
List SIX typical subject areas that should be covered in a site induction.
What THREE main duties of the Health and Safety at Work Act must employees follow?
What does the Health and Safety at Work Act require employers to do with regards specifically to plant?
a) What is the purpose of a Method Statement and b) what is required of the operator?
Name FOUR different types or levels of disciplinary actions or sanctions that can be applied (by employers and judicial bodies) to operators of plant who do not comply with, or follow legislation and regulations.
Why are plant operators generally regarded as ‘safety-critical’ workers?
Name THREE ways in which an operator can minimise their impact upon the environment whilst using the machine.
List TWO items that should be considered if the operator is working alone for long periods?
The operator has to use a new type of crusher that they are unfamiliar with. What do Regulations (i.e. PUWER 98) and other guidance require the operator to have?
What are the possible outcomes of facing prosecution for not complying with legislation and regulations?
Give TWO examples of where The Work at Height Regulations 1995 may apply to crusher operations.
How can a qualification or card benefit a plant operator?
Name THREE ways that a plant operator can contribute in ensuring repeat business with the client or principal contractor.

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Where should the crusher's Operator's Manual be kept and why?
If the operator has to top up the hydraulic oil, state TWO precautions to ensure cleanliness of the system.
Using the Operator's Manual, state the procedure for adjusting conveyor belt tension. **Note**: The Operator's Manual for the machine being used for the test MUST be available for reference by the candidate.
Using the Operator's Manual, state the cold-starting procedure for the machine. **Note**: The Operator's Manual for the machine being used for the test MUST be available for reference by the candidate.
If checking the oil level using a dipstick, why must gloves be worn?
Apart from the operator, who else may need to use the machine's Operator's Manual?
What is the purpose of the sizing bars on the crusher feed?
Name a) THREE differences between 'cone' and 'jaw' type crushers and b) ONE suitable application for each.
Name THREE requirements of the Noise at Work Act 1994 that apply to crusher operations.
Name FIVE items of specific PPE applicable to crusher operations.
What are the THREE actions or stages that a crusher operator undertakes during pre-use inspections?
Name the FOUR key causes of accidents that occur during crushing operations.
a) When would a harness be used and what determines how or what type is used?
a) What is the purpose of a magnetic separator and b) where would it be located?
During work, the engine starts to overheat. Explain the danger if someone tries to remove the radiator or expansion tank cap.

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For mobile crushers, when MUST a banksman/signaller be used before moving a mobile crusher?
What problems and hazards can soft ground cause when travelling a mobile unit across a site?
a) What is the minimum distance allowed near open trenches when travelling with a mobile crusher and b) explain why.
Give THREE reasons that may cause a mobile crusher to tip over sideways during travel.
Give TWO reasons why the operator should have an understanding of the type of material being loaded for crushing.
Explain SIX requirements to be taken into account when positioning a crusher prior to work.
Describe ONE method of how to adjust a cone type crusher to produce the desired aggregate size.
a) Which part of the crusher applies loading or pressure to the ground and b) name ONE way that pressure can be reduced.
As far as is reasonably practical, where should crushing operations be kept clear of?
What are the requirements for the ramps that are to be used by loading shovels loading the crusher?
What are the requirements for the standing for loading excavators?
If setting up to work near a pedestrianised area, state THREE factors that need to be taken into account.
a) What is the recommended minimum distance to be kept away from overhead power lines mounted on wooden poles when setting up the machine and b) explain why a distance should be kept.
If a trench has a depth of 2.0 metres: a) what is the minimum distance to maintain from the edge of the trench when forming stockpiles and b) explain why.
What FOUR steps should initially be taken should a crusher be blocked before remedial work starts?
Why should the engine speed be set to the manufacturer's recommendations on magnet-equipped machines?

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Crusher A42
Technical Test Theory Questions

Name FOUR possible causes for blockages in crushers.
Why is it recommended to leave a layer of material in the feed hopper during loading?
A previous, traditional method of clearing blockages was the use of a wedge or mouse. Explain why this method must not be used.
If radios are to be used during the crushing operations, what FOUR actions and checks must be made by the loading and crusher operators before use?
When using water suppression, where should the water be applied?
Apart from water, name THREE other methods that can be used to minimise dust.
Name TWO things that can cause ‘bridging’.
Name FIVE possible dangers to health if operating the crusher from the platform.
During an unblocking activity, even though the crusher may be switched off: a) what else must be done and b) why?
When is it permitted to enter the crushing chamber area?
What TWO problems can wet weather cause?
If a crusher has appeared to stall, what are the THREE initial steps to take before remedial work starts?
What is the meaning of this hand signal (being demonstrated by the Tester)?
What checks should be made to stockpiled materials at the end of a working day?
Before leaving the machine for a rest break, after switching off the machine, what final action must be carried out?
If parking a mobile unit away from the working area, name THREE places where the machine should NOT be parked.

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Crusher A42
Technical Test Theory Questions

The crusher operator has been asked to drive a mobile crusher onto a transporter/trailer. a) Who is responsible for the loading operations and b) state FOUR actions to be considered by the operator before loading commences.
Why should a crusher be re-fuelled at the end of the day?

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Crusher and Screener A42 & A43
Technical Test Theory Questions

What is the definition of, or how can a hazard be described?
What is the purpose of a risk assessment?
List SIX typical subject areas that should be covered in a site induction.
What THREE main duties of the Health and Safety at Work Act must employees follow?
What does the Health and Safety at Work Act require employers to do with regards specifically to plant?
a) What is the purpose of a Method Statement and b) what is required of the operator?
Name FOUR different types or levels of disciplinary actions or sanctions that can be applied (by employers and judicial bodies) to operators of plant who do not comply with, or follow legislation and regulations.
Why are plant operators generally regarded as ‘safety-critical’ workers?
Name THREE ways in which an operator can minimise their impact upon the environment whilst using a crusher and screener.
List TWO items that should be considered if the operator is working alone for long periods.
The operator has to use a new type of crusher and/or screener that they are unfamiliar with. What do Regulations (i.e. PUWER 98) and other guidance require the operator to have?
What are the possible outcomes of facing prosecution for not complying with legislation and regulations?
Give TWO examples of where The Work at Height Regulations 1995 may apply to crusher and screener operations.
How can a qualification or card benefit a plant operator?
Name THREE ways that a plant operator can contribute in ensuring repeat business with the client or principal contractor.

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Crusher and Screener A42 & A43
Technical Test Theory Questions

Where should the crusher and screener's Operator's Manual be kept and why?
If the operator has to top up the hydraulic oil, state TWO precautions to ensure cleanliness of the system.
Using one of the Operator's Manuals, state the procedure for adjusting conveyor belt tension on a crusher or screener. **Note**: The Operator's Manual for the machine being used for the test MUST be available for reference by the candidate.
Using one of the Operator's Manuals not used in question 18, state the cold-starting procedure for the crusher or screener. **Note**: The Operator's Manual for the machine being used for the test MUST be available for reference by the candidate.
If checking the oil level using a dipstick, why must gloves be worn?
Apart from the operator, who else may need to use the machine's Operator's Manual?
What is the purpose of the sizing bars on the crusher and screener feed?
Name a) THREE differences between 'cone' and 'jaw' type crusher and b) ONE suitable application for each.
Name THREE requirements of the Noise at Work Act 1994 that apply to crusher and screener operations.
Name FIVE items of specific PPE applicable to crusher and screener operations.
What are the THREE actions or stages that a crusher or screener operator undertakes during pre-use inspections?
Name the FOUR key causes of accidents that occur during crushing and screening operations.
a) When would a harness be used and what determines how or what type is used?
a) What is the purpose of a magnetic separator and b) where would it be located?
During work, the engine starts to overheat. Explain the danger if someone tries to remove the radiator or expansion tank cap.

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Crusher and Screener A42 & A43
Technical Test Theory Questions

For mobile crusher and screeners, when MUST a banksman/signaller be used before moving the machine(s)?
What problems and hazards can soft ground cause when travelling a mobile unit across a site?
a) What is the minimum distance allowed near open trenches when travelling with a mobile crusher and/or screener and b) explain why.
Give THREE reasons that may cause a mobile crusher and/or screener to tip over sideways during travel.
How does a trommel-type screener segregate material?
Name THREE types of conveyor that may be used on a screener.
Give TWO reasons why the operator should have an understanding of the type of material being loaded for crushing.
Explain SIX requirements to be taken into account when positioning a crusher and screener prior to work.
Describe ONE method of how to adjust a cone-type crusher to produce the desired aggregate size.
a) Which part of the crusher and/or screener applies loading or pressure to the ground and b) name ONE way that pressure can be reduced.
As far as is reasonably practical, where should crushing and screening operations be kept clear of?
What are the requirements for the ramps that are to be used by loading shovels loading the crusher ?
What are the requirements for the standing for loading excavators?
If setting up to work near a pedestrianised area, state THREE factors that need to be taken into account.
a) What is the recommended minimum distance to be kept away from overhead power lines mounted on wooden poles when setting up a crusher or screener and b) explain why a distance should be kept.

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Crusher and Screener A42 & A43 Technical Test Theory Questions

Give TWO reasons why the operator should have an understanding of the type of material being loaded for screening.
How should the screener be set up to meet the production output specification?
If a trench has a depth of 2.0 metres: a) what is the minimum distance to maintain from the edge of the trench when forming stockpiles and b) explain why.
What FOUR steps should initially be taken should a crusher be blocked before remedial work starts?
Why should the engine speed be set to the manufacturer's recommendations on magnet-equipped machines?
Name FOUR possible causes for blockages in crushers.
Why is it recommended to leave a layer of material in the feed hopper during the loading of a crusher?
A previous, traditional method of clearing blockages on crushers was the use of a wedge or mouse. Explain why this method must not be used.
If radios are to be used during the processing operations, what FOUR actions and checks must be made by the loading crusher and screener operators before use?
When using water suppression, where should the water be applied?
Apart from water, name THREE other methods that can be used to minimise dust.
Name TWO things that can cause 'bridging' when crushing material.
Name FIVE possible dangers to health if operating the crusher or screener from the platform.
During an unblocking activity, even though the crusher and screener may be switched off: a) what else must be done and b) why?
When is it permitted to enter the crushing and screening chamber areas?

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Crusher and Screener A42 & A43
Technical Test Theory Questions

What TWO problems can wet weather cause when crushing and screening?
If a crusher or screener has appeared to stall, what are the THREE initial steps to take before remedial work starts?
What is the meaning of this hand signal (being demonstrated by the Tester)?
Give THREE possible causes of screen box overload.
What is the effect on the screening operation if the screen box is raised?
a) What is meant by roll back and b) how can it be prevented?
What checks should be made to stockpiled materials at the end of a working day?
Before leaving the crusher or screener for a rest break, after switching off the machines, what final action must be carried out?
If parking a mobile unit away from the working area, name THREE places where a crusher and screener should NOT be parked.
The crusher and screener operator has been asked to drive a mobile crusher and/or screener onto a transporter/trailer. a) Who is responsible for the loading operations and b) state FOUR actions to be considered by the operator before loading commences.
Why should a crusher or screener be re-fuelled at the end of the day?

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Screener A43
Technical Test Theory Questions

What is the definition of, or how can a hazard be described?
What is the purpose of a risk assessment?
List SIX typical subject areas that should be covered in a site induction.
What THREE main duties of the Health and Safety at Work Act must employees follow?
What does the Health and Safety at Work Act require employers to do with regards specifically to plant?
a) What is the purpose of a Method Statement and b) what is required of the operator?
Name FOUR different types or levels of disciplinary actions or sanctions that can be applied (by employers and judicial bodies) to operators of plant who do not comply with, or follow legislation and regulations.
Why are plant operators generally regarded as ‘safety-critical’ workers?
Name THREE ways in which an operator can minimise their impact upon the environment whilst using the machine.
List TWO items that should be considered if the operator is working alone for long periods.
The operator has to use a new type of screener that they are unfamiliar with. What do Regulations (i.e. PUWER 98) and other guidance require the operator to have?
What are the possible outcomes of facing prosecution for not complying with legislation and regulations?
Give TWO examples of where The Work at Height Regulations may apply to screener operations.
How can a qualification or card benefit a plant operator?
Name THREE ways that a plant operator can contribute in ensuring repeat business with the client or principal contractor.

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Screener A43
Technical Test Theory Questions

Where should the screener's Operator's Manual be kept and why?
If the operator has to top up the hydraulic oil, state TWO precautions to ensure cleanliness of the system.
Using the Operator's Manual, state the procedure for adjusting conveyor belt tension. **Note**: The Operator's Manual for the machine being used for the test MUST be available for reference by the candidate.
Using the Operator's Manual, state the cold-starting procedure for the machine. **Note**: The Operator's Manual for the machine being used for the test MUST be available for reference by the candidate.
If checking the oil level using a dipstick, why must gloves be worn?
Apart from the operator, who else may need to use the machine's Operator's Manual?
What is the purpose of the sizing bars on the hopper feed?
How does a trommel-type screener segregate material?
Name THREE requirements of the Noise at Work Act 1994 that apply to screener operations.
Name FIVE items of specific PPE applicable to screener operations.
What are the THREE actions or stages that a screener operator undertakes during pre-use inspections?
Name the FOUR key causes of accidents that could occur during screening operations.
a) When would a harness be used and what determines how or what type is used?
Name THREE types of conveyor that may be used on a screener.
a) Where is the spreader located and b) what is its purpose?

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Screener A43
Technical Test Theory Questions

During work, the engine starts to overheat. Explain the danger if someone tries to remove the radiator or expansion tank cap.
For mobile screeners, when MUST a banksman/signaller be used before moving a screener?
What problems and hazards can soft ground cause when travelling a mobile unit across a site?
a) What is the minimum distance allowed near open trenches when travelling with a mobile screener and b) explain why.
Give THREE reasons that may cause a mobile screener to tip over sideways during travel.
Give TWO reasons why the operator should have an understanding of the type of material being loaded for screening.
Explain SIX requirements to be taken into account when positioning a screener prior to work.
How should the screener be set up to meet the production output specification?
a) Which part of the screener applies loading or pressure to the ground and b) name ONE way that pressure can be reduced.
As far as is reasonably practical, where should screening operations be kept clear of?
What are the requirements for the ramps that are to be used by loading shovels loading the screener?
What are the requirements for the standing for loading excavators?
If setting up to work near a pedestrianised area, state THREE factors that need to be taken into account
a) What is the recommended minimum distance to be kept away from overhead power lines mounted on wooden poles when setting up the machine and b) explain why a distance should be kept.
If a trench has a depth of 2.0 metres: a) what is the minimum distance to maintain from the edge of the trench when forming stockpiles and b) explain why.

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Screener A43
Technical Test Theory Questions

What FIVE steps should be initially taken should a screener be blocked before remedial work starts?
Give THREE possible causes of screen box overload.
What is the effect on the screening operation if the screen box is raised?
a) What is meant by roll back and b) how can it be prevented?
If radios are to be used during the screening operations, what FOUR actions and checks must be made by the loading and screener operators before use?
If fitted, when using water suppression, where should the water be applied?
Apart from water, name THREE other methods that can be used to minimise dust.
Why should discharge stockpiles not be allowed to reach conveyor height?
During an unblocking activity, even though the screener may be switched off: a) what else must be done and b) why?
When is it permitted to enter the screening chamber area?
What TWO problems can wet weather cause?
What is the meaning of this hand signal (being demonstrated by the Tester)?
What checks should be made to stockpiled materials at the end of the working day?
Before leaving the machine for a rest break, after switching off the machine, what final action must be carried out?
If parking a mobile unit away from the working area, name THREE places where the machine should NOT be parked.

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Screener A43
Technical Test Theory Questions

The screener operator has been asked to drive a mobile screener onto a transporter/trailer. a) Who is responsible for the loading operations and b) state FOUR actions to be considered by the operator before loading commences.
Why should a screener be re-fuelled at the end of the day?

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Concrete Pump - Trailer Mounted A44 Technical Test Theory Questions

What is the definition of, or how can a hazard be described?
What is the purpose of a risk assessment?
List SIX typical subject areas that should be covered in a site induction.
What THREE main duties of The Health and Safety at Work Act must employees follow?
What does The Health and Safety at Work Act require employers to do with regards specifically to plant?
a) What is the purpose of a Method Statement and b) what is required of the operator?
Name FOUR different types or levels of disciplinary actions or sanctions that can be applied (by employers and judicial bodies) to operators of plant who do not comply with, or follow legislation and regulations.
Why are those who operate pumps generally regarded as ‘safety-critical’ workers?
Name THREE ways in which an operator can minimise their impact upon the environment whilst using the machine.
What effect does wet concrete have if it comes into contact with the skin, particularly over long periods of exposure?
The operator has to use a new type of pump that they are unfamiliar with. What do Regulations (i.e. PUWER 98) and other guidance require the operator to have?
What are the possible outcomes of facing prosecution for not complying with legislation and regulations?
How can a qualification or card benefit a concrete pump operator?
Name THREE ways that a concrete pump operator can contribute in ensuring repeat business with the client or principal contractor.
Where should the User’s Manual be kept and why?

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Concrete Pump - Trailer Mounted A44 Technical Test Theory Questions

What are the THREE actions or stages that a concrete pump operator undertakes during pre-use inspections?
Using the Operator's Manual, state the tyres' operating pressure. **Note**: The Operator's Manual for the machine being used for the test MUST be available for reference by the candidate.
Using the Operator's Manual, state the starting procedure for the pump. **Note**: The Operator's Manual for the machine being used for the test MUST be available for reference by the candidate.
If checking the oil level using a dipstick, why must gloves be worn?
Apart from the operator, who else may need to use the machine's User's Manual?
What is the purpose of stabilisers on the concrete pump?
What is the purpose of the blanking piece?
What are the main component parts of a concrete mix?
What is the difference between: a) a placement hose and b) a delivery hose?
What piece of information would a client need from pump hirer/owner before a hire?
What is the function, if fitted, of the mixer paddles?
On a piston type-pump, what is the purpose of the water box?
Why must the thickness of steel pipelines be checked on a regular basis?
During work, the engine starts to overheat. Explain the danger if someone tries to remove the radiator or expansion tank cap.
a) Which part of the concrete pump applies loading or pressure to the ground and b) how can that pressure be reduced?

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Concrete Pump - Trailer Mounted A44 Technical Test Theory Questions

If setting up to pump concrete in a pedestrianised area, state THREE factors that need to be taken into account.
What is the purpose of pumping grout through the pipeline?
When setting up to work, what should be taken into account for the mixer vehicles?
If pipelines have to be connected to scaffolding, what TWO items must be ensured?
On what basis are pipelines and couplers selected?
Name THREE possible underground hazards that may affect the stability of the trailer when in operation.
If the pump has to be lifted into the required position, name SIX factors to be taken into account prior to the lift taking place.
What checks should be made to the couplers?
What checks should be made to the transmitter of a remote-controlled pump before work?
Before the start for work: a) how should signallers be identified and b) what should be agreed between the pump operator and a signaller?
Before towing a trailer-mounted pump into position, name SIX factors to be taken into account.
What can occur if the placement hose is longer than specified?
a) What is the recommended minimum distance to be kept away from overhead power lines mounted on wooden pylons when setting up the pump and/or pipework and b) explain why a distance should be kept.
If radios are to be used during a pumping operation, what FIVE actions and checks must be made by the concrete pump operator before use?
During the pumping operation, part of the task cannot be carried out as detailed in the method statement. a) What initially must happen to the operation and b) who authorises any changes?

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Describe at least THREE causes of blockages that may occur within the pipeline.
During pumping, if the operator (using a remote control) needs to leave the pump, what TWO things need to be ensured?
When working in a confined area or space, name THREE dangers that can be present.
What is considered as the danger zone around the placement hose?
If the words STOP NOW are given to the concrete pump operator by radio during the pumping operation, what action must the operator take?
If a blockage occurs, what actions must be taken by the operator?
What is the meaning of this hand signal (being demonstrated by the Tester)?
a) What additional items (over and above standard site wear) of PPE are required when cleaning out concrete pumps and b) what characteristics must the PPE have?
Before leaving the pump for a rest break, after switching off the pump, what final action must be carried out?
Name THREE places where the trailer should NOT be parked after completion of the pumping operation.
When is it acceptable to use compressed air to clean out pipelines?
What is the maximum allowable air pressure to clean out the pipes?
Where must waste from the cleaning process be deposited?

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Piling Rig Driven below 15 tonnes A45 Technical Test Theory Questions

What is the definition of, or how can a hazard be described?
What is the purpose of a risk assessment?
List SIX typical subject areas that should be covered in a site induction.
What THREE main duties of The Health and Safety at Work Act must employees follow?
What does The Health and Safety at Work Act require employers to do with regards specifically to plant?
a) What is the purpose of a Method Statement and b) what is required of the operator?
Name FOUR different types or levels of disciplinary actions or sanctions that can be applied (by employers and judicial bodies) to operators of plant who do not comply with, or follow legislation and regulations.
Why are rig operators generally regarded as ‘safety-critical’ workers?
Name THREE ways in which an operator can minimise their impact upon the environment whilst using the machine.
In what situation does a hard hat NOT need to be worn when operating a piling rig?
The operator has to use a new model of rig that they are unfamiliar with. What do Regulations (i.e. PUWER 98) and other guidance require the operator to have?
What are the possible outcomes of facing prosecution for not complying with legislation and regulations?
Give TWO examples of where The Work at Height Regulations may apply to piling rig operations.
How can a qualification or card benefit a rig operator?
Name THREE ways that a rig operator can contribute in ensuring repeat business with the client or principal contractor.

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Piling Rig Driven below 15 tonnes A45 Technical Test Theory Questions

Where should the Operator's Manual be kept and why?
What is the purpose of a roll or ROPS frame?
What are the THREE actions or stages that a rig operator undertakes during pre-use inspections?
Using the Operator's Manual, state the figure for setting the track tension. **Note**: The Operator's Manual for the machine being used for the test MUST be available for reference by the candidate.
Using the Operator's Manual, state the cold-starting procedure for the machine. **Note**: The Operator's Manual for the machine being used for the test MUST be available for reference by the candidate.
A piling rig has been delivered to site, assembled and configured for work. What must be carried out before piling starts and by whom?
If checking the oil level using a dipstick, why must gloves be worn?
List FIVE checks that should be made to the tracks and running gear.
Name THREE different types of driven hammers.
Where would you find the dolly on a percussive driven hammer?
Name THREE different types of driven pile.
What is the purpose of a cofferdam?
Apart from the operator, who else may need to use the machine's Operator's Manual?
What is the purpose of counterweight(s) on the rig?
During work, the engine starts to overheat. Explain the danger if someone tries to remove the radiator or expansion tank cap.

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Piling Rig Driven below 15 tonnes A45 Technical Test Theory Questions

If both travel levers are pushed forwards when the track motors are in front of the cab, in which direction would the machine move?
If the rig has to cross the public highway between two parts of a site, the Road Traffic Act applies. a) What type of licence and which class should the operator hold and b) what is the minimum age allowed?
a) What is the minimum distance allowed near an open excavation when travelling the rig and b) explain why.
When MUST a banksman or signaller be used before moving a rig?
When towing a powerpack why should you never position yourself between the rig and the powerpack?
a) Which part of the rig applies loading or pressure to the ground and b) what needs to be in place to cope with the pressure.
What checks and procedures need to be made before a ‘permit to dig’ can be issued?
Wind speeds can be variable throughout the working day. What action must be taken to ensure safe working conditions are maintained?
When working in a confined area or space: a) what danger can be present with regards to the counterweight of the machine, b) what is the recommended minimum distance and c) what measures must be implemented if the gap is less?
If setting up to pile near a pedestrian footpath, state THREE precautions that could be adopted.
a) What is the recommended minimum distance to be kept away from overhead power lines mounted on metal pylons when setting up the machine and b) explain why a distance should be kept.
What is meant by ‘toeing in’ when referring to the piling activity?
What does ‘backdriving’ mean?
What is meant by the term ‘refusal’?
What is meant by ‘splicing’?

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Piling Rig Driven below 15 tonnes A45 Technical Test Theory Questions

What is meant by the term ‘raking angle’?
What is a ‘driven cast in-situ’ pile?
Give THREE reasons that may cause the rig to overturn.
When working in cellars or confined spaces, a) explain THREE precautions you must take to avoid build up of fumes and b) why is this important?
During the piling operation, part of the task cannot be carried out as detailed in the method statement: a) what initially must happen to the piling operation and b) who authorises any changes?
In driven piling, what is meant by the ‘drop height’?
How can the noise level of the hammering operation be reduced on: a) pre-cast types and b) cast in-situ types?
Why are driven piles generally used on contaminated sites?
What is the function of the shoe (end-cap) as used in cast in-situ piling?
What are pre-cast piles most suitable for?
If the words STOP NOW are given to the rig operator by radio during the lift, what action must the operator take?
a) What is meant by the lifting capacity of the rig and b) who determines it?
Before leaving the cab for a rest break, after parking and switching off the machine, what final action must be carried out?
When parking the machine at the end of the shift, name THREE places where the machine should NOT be parked.
The operator has been asked to drive the machine onto a transporter/trailer. a) Who is responsible for the loading operations and b) state FOUR actions to be considered by the operator before loading commences.

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Piling Rig Driven below 15 tonnes A45
Technical Test Theory Questions

If the operator has loaded the machine onto a transporter/trailer on behalf of a driver, what checks must be carried out before they leave the cab?
Why should the rig be re-fuelled at the end of the day?

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Piling Rig Driven above 15 tonnes A46 Technical Test Theory Questions

What is the definition of, or how can a hazard be described?
What is the purpose of a risk assessment?
List SIX typical subject areas that should be covered in a site induction.
What THREE main duties of The Health and Safety at Work Act must employees follow?
What does The Health and Safety at Work Act require employers to do with regards specifically to plant?
a) What is the purpose of a Method Statement and b) what is required of the operator?
Name FOUR different types or levels of disciplinary actions or sanctions that can be applied (by employers and judicial bodies) to operators of plant who do not comply with, or follow legislation and regulations.
Why are rig operators generally regarded as ‘safety-critical’ workers?
Name THREE ways in which an operator can minimise their impact upon the environment whilst using the machine.
In what situation does a hard hat NOT need to be worn when operating a piling rig?
The operator has to use a new model of rig that they are unfamiliar with. What do Regulations (i.e. PUWER 98) and other guidance require the operator to have?
What are the possible outcomes of facing prosecution for not complying with legislation and regulations?
Give TWO examples of where The Work at Height Regulations may apply to piling rig operations.
How can a qualification or card benefit a rig operator?
Name THREE ways that a rig operator can contribute in ensuring repeat business with the client or principal contractor.

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Piling Rig Driven above 15 tonnes A46 Technical Test Theory Questions

Where should the Operator's Manual be kept and why?
What is the purpose of a roll or ROPS frame?
What are the THREE actions or stages that a rig operator undertakes during pre-use inspections?
Using the Operator's Manual, state the figure for setting the track tension. **Note**: The Operator's Manual for the machine being used for the test MUST be available for reference by the candidate.
Using the Operator's Manual, state the cold-starting procedure for the machine. **Note**: The Operator's Manual for the machine being used for the test MUST be available for reference by the candidate.
A piling rig has been delivered to site, assembled and configured for work. What must be carried out before piling starts and by whom?
If checking the oil level using a dipstick, why must gloves be worn?
List FIVE checks that should be made to the tracks and running gear.
Name THREE different types of driven hammers.
Where would you find the dolly on a percussive driven hammer?
Name THREE different types of driven pile.
What is the purpose of a cofferdam?
Apart from the operator, who else may need to use the machine's Operator's Manual?
What is the purpose of counterweight(s) on the rig?
During work, the engine starts to overheat. Explain the danger if someone tries to remove the radiator or expansion tank cap.

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Piling Rig Driven above 15 tonnes A46 Technical Test Theory Questions

If both travel levers are pushed forwards when the track motors are in front of the cab, in which direction would the machine move?
If the rig has to cross the public highway between two parts of a site, the Road Traffic Act applies. a) What type of licence and which class should the operator hold and b) what is the minimum age allowed?
a) What is the minimum distance allowed near an open excavation when travelling the rig and b) explain why.
When MUST a banksman or signaller be used before moving a rig?
When towing a powerpack why should you never position yourself between the rig and the powerpack?
a) Which part of the rig applies loading or pressure to the ground and b) what needs to be in place to cope with the pressure.
What checks and procedures need to be made before a ‘permit to dig’ can be issued?
Wind speeds can be variable throughout the working day. What action must be taken to ensure safe working conditions are maintained?
When working in a confined area or space: a) what danger can be present with regards to the counterweight of the machine, b) what is the recommended minimum distance and c) what measures must be implemented if the gap is less?
If setting up to pile near a pedestrian footpath, state THREE precautions that could be adopted.
a) What is the recommended minimum distance to be kept away from overhead power lines mounted on metal pylons when setting up the machine and b) explain why a distance should be kept.
What is meant by ‘toeing in’ when referring to the piling activity?
What does ‘backdriving’ mean?
What is meant by the term ‘refusal’?
What is meant by ‘splicing’?

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Piling Rig Driven above 15 tonnes A46 Technical Test Theory Questions

What is meant by the term ‘raking angle’?
What is a ‘driven cast in-situ’ pile?
Give THREE reasons that may cause the rig to overturn.
When working in cellars or confined spaces: a) explain THREE precautions you must take to avoid build up of fumes and b) why is this important?
During the piling operation, part of the task cannot be carried out as detailed in the method statement: a) what initially must happen to the piling operation and b) who authorises any changes?
In driven piling, what is meant by the ‘drop height’?
How can the noise level of the hammering operation be reduced on: a) pre-cast types and b) cast in-situ types?
Why are driven piles generally used on contaminated sites?
What is the function of the shoe (end-cap) as used in cast in-situ piling?
What are pre-cast piles most suitable for?
If the words STOP NOW are given to the rig operator by radio during the lift, what action must the operator take?
a) What is meant by the lifting capacity of the rig and b) who determines it?
Before leaving the cab for a rest break, after parking and switching off the machine, what final action must be carried out?
When parking the machine at the end of the shift, name THREE places where the machine should NOT be parked.
The operator has been asked to drive the machine onto a transporter/trailer. a) Who is responsible for the loading operations and b) state FOUR actions to be considered by the operator before loading commences.

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Piling Rig Driven above 15 tonnes A46 Technical Test Theory Questions

If the operator has loaded the machine onto a transporter/trailer on behalf of a driver, what checks must be carried out before they leave the cab?
Why should the rig be re-fuelled at the end of the day?

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Piling Rig Bored below 15 tonnes A47 Technical Test Theory Questions

What is the definition of, or how can a hazard be described?
What is the purpose of a risk assessment?
List SIX typical subject areas that should be covered in a site induction.
What THREE main duties of The Health and Safety at Work Act must employees follow?
What does The Health and Safety at Work Act require employers to do with regards specifically to plant?
a) What is the purpose of a Method Statement and b) what is required of the operator?
Name FOUR different types or levels of disciplinary actions or sanctions that can be applied (by employers and judicial bodies) to operators of plant who do not comply with, or follow legislation and regulations.
Why are rig operators generally regarded as ‘safety-critical’ workers?
Name THREE ways in which an operator can minimise their impact upon the environment whilst using the machine.
In what situation does a hard hat NOT need to be worn when operating a piling rig?
The operator has to use a new model of rig that they are unfamiliar with. What do Regulations (i.e. PUWER 98) and other guidance require the operator to have?
What are the possible outcomes of facing prosecution for not complying with legislation and regulations?
Give TWO examples of where The Work at Height Regulations may apply to piling rig operations.
How can a qualification or card benefit a rig operator?
Name THREE ways that a rig operator can contribute in ensuring repeat business with the client or principal contractor.

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Piling Rig Bored below 15 tonnes A47 Technical Test Theory Questions

Where should the Operator's Manual be kept and why?
List FIVE checks that should be made to the tracks and running gear.
What is the purpose of a roll over or ROPS frame?
What are the THREE actions or stages that a rig operator undertakes during pre-use inspections?
Using the Operator's Manual, state the figure for setting the track tension. **Note**: The Operator's Manual for the machine being used for the test MUST be available for reference by the candidate.
Using the Operator's Manual, state the cold-starting procedure for the machine. **Note**: The Operator's Manual for the machine being used for the test MUST be available for reference by the candidate.
A piling rig has been delivered to site, assembled and configured for work. What must be carried out before piling starts and by whom?
If checking the oil level using a dipstick, why must gloves be worn?
When using a CFA rig, how does the operator ensure that the auger is vertical?
How is drive transmitted to the short auger?
Why is bored piling more suitable for use within urban areas compared with a driven rig?
What is the purpose of a bored pile wall (contiguous piles or secant wall)?
Apart from the operator, who else may need to use the machine's Operator's Manual?
What is the purpose of counterweight(s) on the rig?
During work, the engine starts to overheat. Explain the danger if someone tries to remove the radiator or expansion tank cap.

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Piling Rig Bored below 15 tonnes A47 Technical Test Theory Questions

If both travel levers are pushed forwards when the track motors are in front of the cab, in which direction would the machine move?
If the rig has to cross the public highway between two parts of a site, the Road Traffic Act applies. a) What type of licence and which class should the operator hold and b) what is the minimum age allowed?
a) What is the minimum distance allowed near an open excavation when travelling the rig and b) explain why.
When MUST a banksman or signaller be used before moving a rig?
When towing a power pack, why should you never position yourself between the rig and the power pack?
a) Which part of the rig applies loading or pressure to the ground and b) what needs to be in place to cope with the pressure.
What checks and procedures need to be made before a ‘permit to dig’ can be issued?
Wind speeds can be variable throughout the working day. What action must be taken to ensure safe working conditions are maintained?
When working in a confined area or space: a) what danger can be present with regards to the counterweight of the machine, b) what is the recommended minimum distance and c) what measures must be implemented if the gap is less?
If setting up to pile near a pedestrian footpath, state THREE precautions that could be adopted.
a) What is the recommended minimum distance to be kept away from overhead power lines mounted on metal pylons when setting up the machine and b) explain why a distance should be kept.
Name TWO different types of bored piling methods.
Give FOUR reasons that may cause the rig to overturn.
When working in cellars or confined spaces: a) explain THREE precautions you must take to avoid build up of fumes and b) why is this important?
During the piling operation, part of the task cannot be carried out as detailed in the method statement. a) What initially must happen to the piling operation and b) who authorises any changes?

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Piling Rig Bored below 15 tonnes A47 Technical Test Theory Questions

What is the function of the shoe/bung/end-cap/flap as used in CFA piling?
How is a rotary auger of a bored rig or a CFA rig cleaned of soil?
Generally, what distance is the controlled or restricted zone around a CFA drilling operation?
What is meant by the term 'Refusal'?
What is meant by a ‘contiguous pile line’?
Explain the purpose of the casings when piling or drilling.
What is ODEX Drilling?
When are the auger gates allowed to be opened in the middle of a CFA operation?
On CFA rigs, if the auger cleaner was failing to clean off the spoil during extraction, what action should be taken?
If the words STOP NOW are given to the rig operator by radio during the lift, what action must the operator take?
a) What is meant by the lifting capacity of the rig winch and b) who determines it?
Before leaving the cab for a rest break, after parking and switching off the machine, what final action must be carried out?
When parking the machine at the end of the shift, name THREE places where the machine should NOT be parked.
The operator has been asked to drive the machine onto a transporter/trailer. a) Who is responsible for the loading operations and b) state FOUR actions to be considered by the operator before loading commences.
If the operator has loaded the machine onto a transporter/trailer on behalf of a driver, what checks must be carried out before they leave the cab?

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Why should the rig be re-fuelled at the end of the day?

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Piling Rig Bored above 15 tonnes A48 Technical Test Theory Questions

What is the definition of, or how can a hazard be described?
What is the purpose of a risk assessment?
List SIX typical subject areas that should be covered in a site induction.
What THREE main duties of The Health and Safety at Work Act must employees follow?
What does The Health and Safety at Work Act require employers to do with regards specifically to plant?
a) What is the purpose of a Method Statement and b) what is required of the operator?
Name FOUR different types or levels of disciplinary actions or sanctions that can be applied (by employers and judicial bodies) to operators of plant who do not comply with, or follow legislation and regulations.
Why are rig operators generally regarded as ‘safety-critical’ workers?
Name THREE ways in which an operator can minimise their impact upon the environment whilst using the machine.
In what situation does a hard hat NOT need to be worn when operating a piling rig?
The operator has to use a new model of rig that they are unfamiliar with. What do Regulations (i.e. PUWER 98) and other guidance require the operator to have?
What are the possible outcomes of facing prosecution for not complying with legislation and regulations?
Give TWO examples of where The Work at Height Regulations may apply to piling rig operations.
How can a qualification or card benefit a rig operator?
Name THREE ways that a rig operator can contribute in ensuring repeat business with the client or principal contractor.

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Piling Rig Bored above 15 tonnes A48 Technical Test Theory Questions

Where should the Operator's Manual be kept and why?
List FIVE checks that should be made to the tracks and running gear.
What is the purpose of a roll over or ROPS frame?
What are the THREE actions or stages that a rig operator undertakes during pre-use inspections?
Using the Operator's Manual, state the figure for setting the track tension. **Note**: The Operator's Manual for the machine being used for the test MUST be available for reference by the candidate.
Using the Operator's Manual, state the cold-starting procedure for the machine. **Note**: The Operator's Manual for the machine being used for the test MUST be available for reference by the candidate.
A piling rig has been delivered to site, assembled and configured for work. What must be carried out before piling starts and by whom?
If checking the oil level using a dipstick, why must gloves be worn?
When using a CFA rig, how does the operator ensure that the auger is vertical?
How is drive transmitted to the short auger?
Why is bored piling more suitable for use within urban areas compared with a driven rig?
What is the purpose of a bored pile wall (contiguous piles or secant wall)?
Apart from the operator, who else may need to use the machine's Operator's Manual?
What is the purpose of counterweight(s) on the rig?
During work, the engine starts to overheat. Explain the danger if someone tries to remove the radiator or expansion tank cap.

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Piling Rig Bored above 15 tonnes A48 Technical Test Theory Questions

If both travel levers are pushed forwards when the track motors are in front of the cab, in which direction would the machine move?
If the rig has to cross the public highway between two parts of a site, the Road Traffic Act applies. a) What type of licence and which class should the operator hold and b) what is the minimum age allowed?
a) What is the minimum distance allowed near an open excavation when travelling the rig and b) explain why.
When MUST a banksman or signaller be used before moving a rig?
When towing a power pack, why should you never position yourself between the rig and the power pack?
a) Which part of the rig applies loading or pressure to the ground and b) what needs to be in place to cope with the pressure.
What checks and procedures need to be made before a ‘permit to dig’ can be issued?
Wind speeds can be variable throughout the working day. What action must be taken to ensure safe working conditions are maintained?
When working in a confined area or space: a) what danger can be present with regards to the counterweight of the machine, b) what is the recommended minimum distance and c) what measures must be implemented if the gap is less?
If setting up to pile near a pedestrian footpath, state THREE precautions that could be adopted.
a) What is the recommended minimum distance to be kept away from overhead power lines mounted on metal pylons when setting up the machine and b) explain why a distance should be kept.
Name TWO different types of bored piling methods.
Give FOUR reasons that may cause the rig to overturn.
When working in cellars or confined spaces: a) explain THREE precautions you must take to avoid build up of fumes and b) why is this important?
During the piling operation, part of the task cannot be carried out as detailed in the method statement. a) What initially must happen to the piling operation and b) who authorises any changes?

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Piling Rig Bored above 15 tonnes A48 Technical Test Theory Questions

What is the function of the shoe/bung/end-cap/flap as used in CFA piling?
How is a rotary auger of a bored rig or a CFA rig cleaned of soil?
Generally, what distance is the controlled or restricted zone around a CFA drilling operation?
What is meant by the term 'Refusal'?
What is meant by a ‘contiguous pile line’?
Explain the purpose of the casings when piling or drilling.
What is ODEX Drilling?
When are the auger gates allowed to be opened in the middle of a CFA operation?
On CFA rigs, if the auger cleaner was failing to clean off the spoil during extraction, what action should be taken?
If the words STOP NOW are given to the rig operator by radio during the lift, what action must the operator take?
a) What is meant by the lifting capacity of the rig winch and b) who determines it?
Before leaving the cab for a rest break, after parking and switching off the machine, what final action must be carried out?
When parking the machine at the end of the shift, name THREE places where the machine should NOT be parked.
The operator has been asked to drive the machine onto a transporter/trailer. a) Who is responsible for the loading operations and b) state FOUR actions to be considered by the operator before loading commences.
If the operator has loaded the machine onto a transporter/trailer on behalf of a driver, what checks must be carried out before they leave the cab?

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Why should the rig be re-fuelled at the end of the day?

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Loader/Securer non STGO A49 Technical Test Theory Questions

What is the definition of, or how can a hazard be described?
What is the purpose of a risk assessment?
List SIX typical subject areas that should be covered in a site induction.
What THREE main duties of the Health and Safety at Work Act must employees follow?
What does the Health and Safety at Work Act require employers to do with regards specifically to vehicles and equipment?
a) What is the purpose of a Method Statement and b) what is required of the driver?
Name FOUR different types or levels of disciplinary actions or sanctions that can be applied (by employers and judicial bodies) to operators of plant/vehicles who do not comply with, or follow legislation and regulations.
Why are those who load and unload plant generally regarded as 'safety-critical' workers?
Name THREE ways in which transport drivers can minimise their impact upon the environment whilst using the vehicle.
In what situation does a hard hat need to be worn when driving a transporter on a construction site?
The transport driver has to drive a new type of plant that they are unfamiliar with. What do Regulations (i.e. PUWER 98) and other guidance require the transport driver to have?
What are the possible outcomes of facing prosecution for not complying with legislation and regulations?
Give TWO examples of where The Work at Height Regulations may apply to transporters.
How can a qualification or card benefit a transport driver?
Name THREE ways that a transport driver can contribute in ensuring repeat business with the client or principal contractor.

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Where should the vehicle's and/or transported machine's manual be kept and why?
What is a possible consequence of using a tyre with a deep cut in the sidewall?
If the transport driver has to top up the engine oil, state TWO precautions to ensure cleanliness of the system.
Using the machine's Operator's Manual, state the procedure for preparing and loading the machine onto a transporter. **Note**: The Operator's Manual for one of the items of plant being used for the test MUST be available for reference by the candidate.
Using the machine's Operator's Manual, state how the machine must be secured for transport. **Note**: The Operator's Manual for one of the items of plant being used for the test MUST be available for reference by the candidate.
If checking the oil level using a dipstick, why must gloves be worn?
What is the difference between a low loader and a semi-trailer?
Give an example of 'road friendly' suspension.
On start up, the air pressure on the vehicle is low. What actions must the transport driver carry out before work and during work?
During work, the engine starts to overheat. Explain the danger if someone tries to remove the radiator or expansion tank cap.
Before setting off to retrieve a machine from site, in terms of arrival, what THREE things may the driver ideally need to know before departure?
What problems and hazards can soft ground cause to a loaded transporter?
a) What is the minimum distance allowed near open trenches when travelling with a transporter and b) explain why.
When are the most likely times that loads may move during transit in the transporter?
Give THREE possible reasons why transporters should not stray off the designated travel routes.

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Loader/Securer non STGO A49 Technical Test Theory Questions

If setting up to load or unload in a pedestrianised area, state THREE factors that need to be taken into account.
Name SIX safety considerations when selecting a site for loading or unloading plant.
Once the transporter is positioned, state SIX actions to be considered before loading commences.
Where and why would packing be used?
According to the Road Traffic Act 1988, when is loading and unloading allowed on verges or footpaths?
Whenever possible, who should decide the positioning of the transporter for loading?
When working in a confined area or space, name THREE hazards that can occur.
a) What is the recommended minimum distance to be kept away from overhead power lines mounted on wooden poles when loading and b) explain why a distance should be kept.
What is the maximum distance that the end marker board must be from the edge of a projection?
What checks should be made to flat webbing slings before use?
Under what conditions can lashing chains be used for lifting operations?
What should be considered when securing a 360 excavator fitted with rubber tracks
Why should the centre of gravity of a load be in front of the rear axle of an articulated semi trailer?
What effect does chocking timber (dunnage) have on carrying capacity?
If loading a smooth drum ride-on roller, how can friction between the drums and the transporter ramps/bed be increased?

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Loader/Securer non STGO A49 Technical Test Theory Questions

When a long load on a short rigid vehicle results in excessive overhang over the rear of the vehicle, what are TWO possible dangers?
What is the definition of a ‘long load’?
What is the maximum width of a load before it becomes classed as a ‘wide load’?
State three instances when marker boards must be fitted.
Give FIVE instances where lights should be fitted to an overhanging load both widthways and lengthways.
What THREE pieces of information are needed to calculate axle loadings?
What is the difference between kerbside weight and unladen weight?
Before loading or unloading on the public highway, what specific measures must be considered?
During the loading process, in terms of the load, what is the transporter driver responsible for?
When loading, where is the optimum, or best position to place an item of plant?
What is the recommended maximum distance between lashings on the length of a load?
In general: a) what is the maximum angle that lashings should be restricted to and b) why?
When securing machines having hydraulically operated booms (e.g. 360 excavators etc.), what should be ensured when restraining?
On articulated-steered plant, what should be engaged after loading?
If an item of plant is being loaded where it is known that the parking brake is not fully effective, what action must be taken?

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State: a) at what distance a rear overhang should be identified and b) how.
What checks should be made to cabbed machines after loading?
What is the meaning of this hand signal (being demonstrated by the Tester)?
After loading and securing plant for transit: a) when should the lashings or securing equipment be re-checked and b) why?
Before leaving the cab for a rest break, after parking and switching off the vehicle, what final action must be carried out?
When parking the vehicle at the end of the shift, name THREE places where the transporter should NOT be parked.
Many transporters have a turbo-charged engine. a) What is the normal procedure before switching off the engine after working and b) what happens if the procedure is not followed?
What is meant by Maximum Authorised Mass?
What is the maximum gross train weight of vehicle movement allowed under the current Construction and Use Regulations?
On LGVs above 3.5 tonnes first used after January 2007: a) how many mirrors are required and b) where should they be positioned?
State the maximum allowed speeds of a transporter loaded with a 13 tonne 360 degree excavator which is travelling on: a) motorway, b) dual carriageway (unrestricted) and c) single carriageway (unrestricted).
When a pick-up/transit type vehicle is over 3.5 tonnes in weight, what is required with regard to testing requirements?
Where should the vehicle plating certificate be positioned on the vehicle?
If not indicated, the headroom under bridges in the UK is at least what height?
Name FOUR items that must be displayed on a DoT-approved plating certificate.

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Loader/Securer non STGO A49
Technical Test Theory Questions

What length of retraining is required every five years for the Certificate of Professional Competence (CPC) scheme?
a) What type of licence and which class should a transport driver hold and b) what is the minimum age allowed?
Under the Road Traffic Act 1998, state ONE instance when an overloaded vehicle may travel on the public highway
If towing a trailer, what class of licence is required?

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What is the definition of, or how can a hazard be described?
What is the purpose of a risk assessment?
List SIX typical subject areas that should be covered in a site induction.
What THREE main duties of the Health and Safety at Work Act must employees follow?
What does the Health and Safety at Work Act require employers to do with regards specifically to vehicles and equipment?
a) What is the purpose of a Method Statement and b) what is required of the driver?
Name FOUR different types or levels of disciplinary actions or sanctions that can be applied (by employers and judicial bodies) to operators of plant/vehicles who do not comply with, or follow legislation and regulations.
Why are those who load and unload plant generally regarded as 'safety-critical' workers?
Name THREE ways in which transport drivers can minimise their impact upon the environment whilst using the vehicle.
In what situation does a hard hat need to be worn when driving a transporter on a construction site?
The transport driver has to drive a new type of plant that they are unfamiliar with. What do Regulations (i.e. PUWER 98) and other guidance require the transport driver to have?
What are the possible outcomes of facing prosecution for not complying with legislation and regulations?
Give TWO examples of where The Work at Height Regulations may apply to transporters.
How can a qualification or card benefit a transport driver?
Name THREE ways that a transport driver can contribute in ensuring repeat business with the client or principal contractor.

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Where should the vehicle's and/or transported machine's manual be kept and why?
What is a possible consequence of using a tyre with a deep cut in the sidewall?
If the transport driver has to top up the engine oil, state TWO precautions to ensure cleanliness of the system.
Using the machine's Operator's Manual, state the procedure for preparing and loading the machine onto a transporter. **Note**: Operator's Manual for one of the items of plant being used for the test MUST be available for reference by the candidate
Using the machine's Operator's Manual, state how the machine must be secured for transport. **Note**: The Operator's Manual for one of the items of plant being used for the test MUST be available for reference by the candidate.
If checking engine oil levels using a dipstick, why must gloves be worn?
What is the difference between a low loader and a semi-trailer?
Give an example of 'road friendly' suspension.
On start up, the air pressure on the vehicle is low. What actions must the transport driver carry out before work and during work?
During work, the engine starts to overheat. Explain the danger if someone tries to remove the radiator or expansion tank cap.
Before setting off to retrieve a machine from site, in terms of arrival, what THREE things may the driver ideally need to know before departure?
What problems and hazards can soft ground cause to a loaded transporter?
a) What is the minimum distance allowed near open trenches when travelling with a transporter and b) explain why.
When are the most likely times that loads may move during transit in the transporter?
Give THREE possible reasons why transporters should not stray off the designated travel routes.

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If setting up to load or unload in a pedestrianised area, state THREE factors that need to be taken into account.
Name SIX safety considerations when selecting a site for loading or unloading plant.
Once the transporter is positioned, state SIX actions to be considered before loading commences.
Where and why would packing be used?
According to the Road Traffic Act 1988, when is loading and unloading allowed on verges or footpaths?
Whenever possible, who should decide the positioning of the transporter for loading?
When working in a confined area or space, name THREE hazards that can occur.
a) What is the recommended minimum distance to be kept away from overhead power lines mounted on wooden poles when loading and b) explain why a distance should be kept.
What is the maximum distance that the end marker board must be from the edge of a projection?
What checks should be made to flat webbing slings before use?
Under what conditions can lashing chains be used for lifting operations?
What should be considered when securing a 360 excavator fitted with rubber tracks
Why should the centre of gravity of a load be in front of the rear axle of an articulated semi-trailer?
What effect does chocking timber (dunnage) have on carrying capacity?
If loading a smooth drum ride-on roller, how can friction between the drums and the transporter ramps/bed be increased?

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When a long load on a short rigid vehicle results in excessive overhang over the rear of the vehicle, what are TWO possible dangers?
What is the definition of a ‘long load’?
What is the maximum width of a load before it becomes classed as a ‘wide load’?
State three instances when marker boards must be fitted.
Give FIVE instances where lights should be fitted to an overhanging load both widthways and lengthways.
What THREE pieces of information are needed to calculate axle loadings?
What is the difference between kerbside weight and unladen weight?
During the loading process, in terms of the load, what is the transporter driver responsible for?
Before loading or unloading on the public highway, what specific measures must be considered?
When loading, where is the optimum, or best position to place an item of plant?
What is the recommended maximum distance between lashings on the length of a load?
In general: a) what is the maximum angle that lashings should be restricted to and b) why?
When securing machines having hydraulically operated booms (e.g. 360 excavators etc.), what should be ensured when restraining?
On articulated-steered plant, what should be engaged after loading?
If an item of plant is being loaded where it is known that the parking brake is not fully effective, what action must be taken?

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State: a) at what distance a rear overhang should be identified and b) how.
What checks should be made to cabbed machines after loading?
Under Special Types General Order, give TWO instances when an attendant is required.
What is the minimum height of an amber flashing beacon?
When would outriggers on the trailer normally be used?
What is the meaning of this symbol (being demonstrated by the Tester)?
A 70 tonne tracked excavator is being transported. A spare bucket is part of the load. a) Is this allowed and b) give a reason for your answer.
After loading and securing plant for transit: a) when should the lashings or securing equipment be re-checked and b) why?
Before leaving the cab for a rest break, after parking and switching off the vehicle, what final action must be carried out?
When parking the vehicle at the end of the shift, name THREE places where the transporter should NOT be parked.
Many transporters have a turbo-charged engine. a) What is the normal procedure before switching off the engine after working and b) what happens if the procedure is not followed?
What is meant by Maximum Authorised Mass?
What is the maximum gross train weight of vehicle movement allowed under the current Construction and Use Regulations?
On LGVs above 3.5 tonnes first used after January 2007: a) how many mirrors are required and b) where should they be positioned?
State the maximum allowed speeds of a fully loaded category 3 transporter which is travelling on: a) motorway, b) dual carriageway (unrestricted) and c) single carriageway (unrestricted).

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In terms of widths, when do the Police require notification of the movement?
Where should the vehicle plating certificate be positioned on the vehicle?
If not indicated, the headroom under bridges in the UK is at least what height?
Name FOUR items that must be displayed on a DoT-approved plating certificate.
What length of retraining is required every five years for the Certificate of Professional Competence (CPC) scheme?
a) What type of licence and which class should STGO transport drivers hold and b) what is the minimum age allowed?
What is the maximum allowable total laden weight of a category 2 vehicle or combination?
Under the Road Traffic Act 1998, state ONE instance when an overloaded vehicle may travel on the public highway
State the minimum time period when notification has to be given to the Highways and Bridges Authorities if the gross weight exceeds construction and use regulations but does not exceed 80,000 kg.
What is the maximum permitted axle weight on a Low Loader?
When is HA form VR1 required to be submitted?

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Dump Truck - Articulated Chassis A56 Technical Test Theory Questions

What is the definition of, or how can a hazard be described?
What is the purpose of a risk assessment?
List SIX typical subject areas that should be covered in a site induction.
What THREE main duties of the Health and Safety at Work Act must employees follow?
What does the Health and Safety at Work Act require employers to do with regards specifically to plant?
a) What is the purpose of a Method Statement and b) what is required of the operator?
Name FOUR different types or levels of disciplinary actions or sanctions that can be applied (by employers and judicial bodies) to operators of plant who do not comply with, or follow legislation and regulations.
Why are plant operators generally regarded as ‘safety-critical’ workers?
Name THREE ways in which an operator can minimise their impact upon the environment whilst using the machine.
In what situation does a hard hat NOT need to be worn when operating a dump truck?
The operator has to use a new type of dump truck that they are unfamiliar with. What do Regulations (i.e. PUWER 98) and other guidance require the operator to have?
What are the possible outcomes of facing prosecution for not complying with legislation and regulations?
Give TWO examples of where The Work at Height Regulations may apply to dump trucks.
How can a qualification or card benefit a plant operator?
The function or job role of a dump truck operator, when transporting loads, is to?

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Dump Truck - Articulated Chassis A56 Technical Test Theory Questions

Name THREE ways that a plant operator can contribute in ensuring repeat business with the client or principal contractor.
Where should the dump truck's Operator's Manual be kept and why?
What is a possible consequence of using a tyre with a deep cut in the sidewall?
When would the body safety strut or support be used?
If the operator has to top up the hydraulic oil, state TWO precautions to ensure cleanliness of the system.
Using the Operator's Manual, state the figure for tyres' operating pressure. **Note:** The Operator's Manual for the machine being used for the test MUST be available for reference by the candidate.
Using the Operator's Manual, state the cold-starting procedure for the machine. **Note**: The Operator's Manual for the machine being used for the test MUST be available for reference by the candidate.
On articulated dump trucks, steering is achieved by actuating a hydraulic ram (or rams) which is controlled by turning the steering wheel. a) How does the engine supply the oil flow and b) what happens to the steering when the engine stops?
If checking the oil level using a dipstick, why must gloves be worn?
Apart from the operator, who else may need to use the machine's Operator's Manual?
What is the purpose of a ROPS cab?
A dump truck is classified by a manufacturer as a 30 tonne machine. What does this mean?
State the purpose of a heated body.
On start up, the air pressure on the machine is low. What actions must the operator carry out before work and during work?
During work, the engine starts to overheat. Explain the danger if someone tries to remove the radiator or expansion tank cap.

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Dump Truck - Articulated Chassis A56
Technical Test Theory Questions

The rear axle units on most dump trucks pivot on the chassis. Explain the reason for pivoting axles.
a) State the purpose of a retarder and b) the possible consequences of not using it when required.
a) Name THREE purposes of the raised lugs on tyres and b) what can happen to a dump truck if the lugs are severely worn?
What problems and hazards can soft ground cause to a loaded dump truck?
a) Give ONE advantage and b) TWO disadvantages of rear-mounted cameras.
a) What is the minimum distance allowed near open trenches when travelling with a dump truck and b) explain why.
If the machine is being travelled or working on the public highway, including adjacent pavements and verges, the Road Traffic Act applies. a) What type of licence and which class should the operator hold and b) what is the minimum age allowed?
When travelling on wet clay, what effect does this have on the dump truck?
Why must the seat belt be worn at all times, even with the cab door closed?
Give THREE possible reasons why dump trucks should not stray off the designated haul routes.
If setting up to work in a pedestrianised area, state THREE factors that need to be taken into account.
Whenever possible, who should decide the positioning of the dump truck for loading?
The operator is asked to tip material into a new trench. State FIVE different requirements that must be considered or implemented before tipping commences.
Give TWO reasons why the dump truck operator should have an understanding of the type of spoil being transported.
When working in a confined area or space, what danger can be present with an articulated dump truck with regards to steering?

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Dump Truck - Articulated Chassis A56 Technical Test Theory Questions

Why should tail gates not be fitted when transporting bulky or rock type material?
When working in a confined area or space, name THREE hazards that can occur.
a) What is the recommended minimum distance to be kept away from overhead power lines mounted on wooden poles when tipping loads and b) explain why a distance should be kept.
a) Why should the body of the dump truck be raised slowly/carefully especially with wet or sticky material and b) what would be a consequence if this was not done?
Who should determine the maximum load that should be placed into the body of the dump truck?
State TWO requirements of using a stop block or earth bank (berm) at a trench discharging point.
When tipping a load, the centre of gravity of the machine changes. a) How does this affect the dump truck and b) state TWO actions to avoid accidents.
If a load has to be tipped on a slope, what may happen if the load is tipped downhill and why?
An operator has been asked to transport materials from one site to another using the public highway, for which the Road Traffic Act applies. What effect can this have on this activity?
What is regarded as the most productive position for the dump truck to be in when being loaded by a wheeled loading shovel working from a stockpile?
What is the meaning of this hand signal (being demonstrated by the Tester)?
Operators should lower the body fully before driving away. Give TWO possible consequences if this is not carried out.
Before leaving the cab for a rest break, after parking and switching off the machine, what final action must be carried out?
When parking the machine at the end of the shift, name THREE places where the dump truck should NOT be parked.
Many dump trucks have a turbo-charged engine. a) What is the normal procedure before switching off the engine after working and b) what happens if the procedure is not followed?

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Dump Truck - Articulated Chassis A56
Technical Test Theory Questions

Why should a dump truck be re-fuelled at the end of the day?
The operator has been asked to drive the machine onto a transporter/trailer. a) Who is responsible for the loading operations and b) state FOUR actions to be considered by the operator before loading commences.
If the operator has loaded the machine onto a transporter/trailer on behalf of a driver, state THREE actions that must be carried out before they leave the machine.

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Dump Truck - Rigid Chassis A57 Technical Test Theory Questions

What is the definition of, or how can a hazard be described?
What is the purpose of a risk assessment?
List SIX typical subject areas that should be covered in a site induction.
What THREE main duties of the Health and Safety at Work Act must employees follow?
What does the Health and Safety at Work Act require employers to do with regards specifically to plant?
a) What is the purpose of a Method Statement and b) what is required of the operator?
Name FOUR different types or levels of disciplinary actions or sanctions that can be applied (by employers and judicial bodies) to operators of plant who do not comply with, or follow legislation and regulations.
Why are plant operators generally regarded as ‘safety-critical’ workers?
Name THREE ways in which an operator can minimise their impact upon the environment whilst using the machine.
In what situation does a hard hat NOT need to be worn when operating a dump truck?
The operator has to use a new type of dump truck that they are unfamiliar with. What do Regulations (i.e. PUWER 98) and other guidance require the operator to have?
What are the possible outcomes of facing prosecution for not complying with legislation and regulations?
Give TWO examples of where The Work at Height Regulations may apply to dump trucks.
How can a qualification or card benefit a plant operator?
The function or job role of a dump truck operator, when transporting loads, is to?

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Dump Truck - Rigid Chassis A57
Technical Test Theory Questions

Name THREE ways that a plant operator can contribute in ensuring repeat business with the client or principal contractor.
Where should the dump truck's Operator's Manual be kept and why?
What is a possible consequence of using a tyre with a deep cut in the sidewall?
When would the body safety strut or support be used?
If the operator has to top up the hydraulic oil, state TWO precautions to ensure cleanliness of the system.
Using the Operator's Manual, state the figure for tyres' operating pressure. For tracked units, state checks needed to be made to the track belts. **Note**: TheOperator's Manual for the machine being used for the test MUST be available for reference by the candidate.
Using the Operator's Manual, state the cold-starting procedure for the machine. **Note**: The Operator's Manual for the machine being used for the test MUST be available for reference by the candidate.
If fitted, name the purpose of having independent front suspension.
If checking the oil level using a dipstick, why must gloves be worn?
Apart from the operator, who else may need to use the machine's Operator's Manual?
What is the purpose of a ROPS cab?
A dump truck is classified by a manufacturer as a 60 tonne machine. What does this mean?
Why do most dump trucks have a sloping body tail?
On start up, the air pressure on the machine is low. What actions must the operator carry out before work and during work?
During work, the engine starts to overheat. Explain the danger if someone tries to remove the radiator or expansion tank cap.

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Dump Truck - Rigid Chassis A57 Technical Test Theory Questions

a) State the purpose of a retarder and b) the possible consequences of not using it when required.
a) Name THREE purposes of the raised lugs on tyres and b) what can happen to a dump truck if the lugs are severely worn?
What problems and hazards can soft ground cause to a loaded dump truck?
a) Give ONE advantage and b) TWO disadvantages of rear-mounted cameras.
a) What is the minimum distance allowed near open trenches when travelling with a dump truck and b) explain why.
If the machine is being travelled or working on the public highway, including adjacent pavements and verges, the Road Traffic Act applies. a) What type of licence and which class should the operator hold and b) what is the minimum age allowed?
When travelling on wet clay, what effect does this have on the dump truck?
Why must the seat belt be worn at all times, even with the cab door closed?
Name THREE conditions that the mirrors on the machine must be in.
Give THREE possible reasons why dump trucks should not stray off the designated haul routes.
If setting up to work in a pedestrianised area, state THREE factors that need to be taken into account.
Whenever possible, who should decide the positioning of the dump truck for loading?
The operator is asked to tip material into a new trench. State FIVE different requirements that must be considered or implemented before tipping commences.
Give TWO reasons why the dump truck operator should have an understanding of the type of spoil being transported.
Why should tail gates not be fitted when transporting bulky or rock type material?

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Dump Truck - Rigid Chassis A57
Technical Test Theory Questions

When working in a confined area or space, name THREE hazards that can occur.
a) What is the recommended minimum distance to be kept away from overhead power lines mounted on wooden poles when tipping loads and b) explain why a distance should be kept.
a) Why should the body of the dump truck be raised slowly/carefully especially with wet or sticky material and b) what would be a consequence if this was not done?
Who should determine the maximum load that should be placed into the body of the dump truck?
State TWO requirements of using a stop block or earth bank (berm) at a trench discharging point.
When tipping a load, the centre of gravity of the machine changes. a) How does this affect the dump truck and b) state TWO actions to avoid accidents?
If a load has to be tipped on a slope, what may happen if the load is tipped downhill and why?
An operator has been asked to transport materials from one site to another using the public highway, for which the Road Traffic Act applies. What effect can this have on this activity?
What is regarded as the most productive position for the dump truck to be in when being loaded by a wheeled loading shovel working from a stockpile?
What is the meaning of this hand signal (being demonstrated by the Tester)?
Operators should lower the body fully before driving away. Give TWO possible consequences if this is not carried out.
Before leaving the cab for a rest break, after parking and switching off the machine, what final action must be carried out?
Many dump trucks have a turbo-charged engine. a) What is the normal procedure before switching off the engine after working and b) what happens if the procedure is not followed?
When parking the machine at the end of the shift, name THREE places where the dump truck should NOT be parked.
Why should a dump truck be re-fuelled at the end of the day?

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Dump Truck - Rigid Chassis A57
Technical Test Theory Questions

The operator has been asked to drive the machine onto a transporter/trailer. a) Who is responsible for the loading operations and b) state FOUR actions to be considered by the operator before loading commences.
If the operator has loaded the machine onto a transporter/trailer on behalf of a driver, state THREE actions that must be carried out before they leave the machine.

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Excavator 360 - Below 10 Tonnes A58 Technical Test Theory Questions

Why is it important that the bucket/attachment is lowered and the engine switched off before the operator exits the cab?
What makes up the total (or gross) weight of a load that is to be lifted?
When an object is needed to be lifted on a site, what should be the first consideration?
If the operator has loaded the machine onto a transporter/trailer on behalf of a driver, what checks must be carried out before they leave the cab?
Describe ONE physical method of checking that a bucket is fully secured to the quick-hitch coupler prior to work.
Name THREE ways that a plant operator can contribute in ensuring repeat business with the client or principal contractor.
Using the lifting capacity diagram for A58: a) what is the maximum lifting capacity at a 4 m radius over the sides of the track with the load at a height of 1 m b) what effect does fitting a bucket have on the lifting capacity c) what effect does the dozer blade have on the lifting capacity?
Give FOUR reasons that may cause the machine to tip over (forwards and/or sideways).
When working in a confined area or space: a) what danger can be present with regards to the counterweight of the machine b) when should measures be taken c) what measures should be implemented?
When slewing with a load, where should the operator be looking?
What is the purpose of the counterweight of the machine?
What is the definition of, or how can a hazard be described?
Why should different soils be segregated during excavating?
What is regarded as the danger or hazard zone during a lifting operation?
If a yellow-coloured marker tape is unearthed during excavating, which TWO types of services could this indicate?

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Excavator 360 - Below 10 Tonnes A58 Technical Test Theory Questions

When must a signaller be used before moving an excavator?
Explain the purpose of a lift plan.
Using the operator's manual, state the cold-starting procedure for the machine. **Note:** The operator's manual for the machine being used for the test **must** be available for reference by the candidate.
If travelling with a load, name FIVE factors that must be taken into account by the operator before moving.
Describe TWO actions to be taken for an open trench at the end of a working day.
Explain ALL visual checks that must be carried out on all types of quick-hitch, bucket-attaching systems before use.
What is the main purpose of a rated capacity indicator (RCI) or load moment indicator (LMI)?
What information does the 'dig-envelope' (also known as 'working range') chart give? (Candidates may be shown a copy of a chart.)
Who determines the lifting/object handling capacity of the machine?
What is the purpose of a roll or ROPS frame?
If attaching accessories to a quick-hitch coupler, give TWO reasons why the coupler should be tilted in the downwards position (ram extended)?
If the machine is being travelled or working on the public highway, including adjacent pavements and verges, the Road Traffic Act applies. a) What type of licence and which classes should the operator hold? b) What is the minimum age allowed?
According to legislation, when are check valves and a rated capacity or load moment indicator required?
Before manually changing any bucket: a) where should the bucket be positioned (in relation to the ground) before removing the final pin? b) Why?
What is meant by zero-tail swing excavators?

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Excavator 360 - Below 10 Tonnes A58 Technical Test Theory Questions

What is the purpose of a risk assessment?
What effect can a swinging load have on an excavator?
If the operator has to top up the hydraulic oil, state TWO precautions to ensure cleanliness of the system.
The operator has to fit and use a new bucket using a quick-hitch coupler that they are unfamiliar with. What do Regulations (such as PUWER 98) and other guidance require the operator to have?
Accessories must only be attached to manufacturers' approved lifting points. Explain THREE possible consequences if the recommendations are not followed.
Why must the seat belt be worn, even with the cab door closed?
If the accessory attachment point is not part of the bucket, give TWO reasons why it should be removed.
If the excavator is carrying out deep excavating work using the full working range, what hazard may occur?
If setting up to excavate in a confined area, name TWO things that should be taken into account before starting.
What THREE main duties of the Health and Safety at Work Act must employees follow?
The safe working load (SWL) or working load limit (WLL) of a multi-leg chain sling only applies in what TWO conditions or configuration?
What particular and specific hazards can affect the stability of the machine when working on old, industrial (brownfield) sites?
In what situation does a hard hat NOT need to be worn when operating a 360 excavator?
List SIX typical subject areas that should be covered in a site induction.
If setting up to work in a pedestrianised area, state THREE factors that need to be taken into account.

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Excavator 360 - Below 10 Tonnes A58 Technical Test Theory Questions

On both tracked and wheeled types: a) what differs between lifting over the side compared to over the front or the rear of the machine? b) Explain why.
If both travel levers (or travel pedal for wheeled machines) are pushed forwards when the track motors (or driving wheels) are in front of the cab, in which direction would the machine move?
If a trench has a depth of 2 m: a) what is the minimum distance to maintain from the edge of the trench when placing spoil? b) Explain why.
What needs to be inspected on a quick-hitch coupler if attaching lifting accessories for the lifting of slung loads?
On a semi-automatic, quick-hitch bucket-attaching system: a) what is the purpose of the safety pin b) what checks must be made to the pin before use?
State the purpose of the check valve(s) located on the boom cylinder rams.
What is the nearest distance allowed to gas pipes when excavating with the machine?
Why must excavator operators not begin to load vehicles until the forward-tipping dumper driver is clear of their machine?
If the load inadvertently or accidentally lands, what course of action should be taken?
a) What is the purpose of a method statement? b) What is required of the operator?
Apart from the operator, who else may need to use the machine operator's manual?
If checking the oil level using a dipstick, why must gloves be worn?
Before leaving the cab for a rest break, after parking and switching off the machine, what final action must be carried out?
Give THREE reasons why an oversize bucket should not be used when excavating trenches to specification.
What does the Health and Safety at Work Act require employers to do, specifically regarding plant?

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Before lowering into or moving a drag box into a trench, what trench-related checks must be made?
Why are plant operators generally regarded as ‘safety-critical’ workers?
What factors determine the shoring requirements of a trench?
Which parts of the machine is the radius (for lifting) measured from?
Using the operator’s manual, state the figure for setting track tension. For wheeled units, state the tyres’ operating pressure. **Note:** The operator’s manual for the machine being used for the test must be available for reference by the candidate.
Why should an excavator be re-fuelled at the end of the day?
How can a qualification or card benefit a plant operator?
Why should long loads be lifted using a swivelling type lifting accessory?
Many smaller excavators have the ability to slew the boom (mounted on a king post) relative to the cab/upper structure. Give one application where this facility may be used.
The operator is asked to excavate a new trench. State FIVE different requirements that must be considered or implemented before work commences.
What is the meaning of this hand signal (being demonstrated by the tester)?
Name THREE ways in which an operator can minimise their impact upon the environment whilst using the machine.
Why must the controls be isolated before each load can be attached or disconnected by the slinger?
Where should the excavator’s operator’s manual be kept and why?
a) What is the recommended minimum distance to be kept away from overhead power lines mounted on wooden poles when setting up the machine? b) Explain why a distance should be kept.

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Excavator 360 - Below 10 Tonnes A58 Technical Test Theory Questions

If the machine's rated capacity/object handling capacity chart is not available for reference, what other methods can be used to determine the machine's lifting capacity?
Name FOUR different types or levels of disciplinary actions or sanctions that can be applied (by employers and judicial bodies) to operators of plant who do not comply with, or follow legislation and regulations.
Give TWO reasons why, wherever possible, operators should excavate the ground in layers.
When parking the machine at the end of the shift, name THREE places where the machine should not be parked.
Manufacturers' lifting or object handling capacity charts apply (in all known cases) when the machine is level. What is the effect if a load is lifted or travelled facing downhill on a downhill slope?
What are the possible outcomes of facing prosecution for not complying with legislation and regulations?
If a hook is fitted to the machine for lifting purposes, what must be checked before use?
If the operator has been asked to drive the machine onto a transporter/trailer: a) who is responsible for the loading operations? b) State FOUR actions to be considered by the operator before loading commences.
During work, the engine starts to overheat. Explain the danger if someone tries to remove the radiator or expansion tank cap.
Name TWO types of equipment used to ensure that excavation levels, measurements and positions are to the required specification.
With regards to lifting accessories, irrespective of who supplied the accessories, what THREE factors should be ensured before the accessories are used?
Cable avoidance tools (CATs) can detect a variety of buried services. What type of material do they have limitations in locating?

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Excavator 360 - Below 10 Tonnes A58
Lifting Operations only
Technical Test Theory Questions

What makes up the total (or gross) weight of a load that is to be lifted?
With regards to lifting accessories, irrespective of who supplied the accessories, what THREE factors should be ensured before the accessories are used?
Using the lifting capacity diagram for A58: a) what is the maximum lifting capacity at 4 m radius over the sides of the track with the load at a height of 1 m b) what effect does fitting a bucket have on the lifting capacity c) what effect does the dozer blade have on the lifting capacity?
Manufacturers' lifting or object handling capacity charts apply (in all known cases) when the machine is level. What is the effect if a load is lifted or travelled facing downhill on a downhill slope?
When slewing with a load, where should the operator be looking?
Before lowering into or moving a drag box into a trench, what trench-related checks must be made?
Why must the controls be isolated before each load can be attached or disconnected by the slinger?
What is regarded as the danger or hazard zone during a lifting operation?
On both tracked and wheeled types: a) what differs between lifting over the side compared to over the front or the rear of the machine? b) Explain why.
Explain the purpose of a lift plan.
If travelling with a load, name FIVE factors that must be taken into account by the operator before moving.
What is the main purpose of a rated capacity indicator (RCI) or load moment indicator (LMI)?
Who determines the lifting/object handling capacity of the machine?
If attaching accessories to a quick-hitch coupler, give TWO reasons why the coupler should be tilted in the downwards position (ram extended).
According to legislation, when are check valves and a rated capacity or load moment indicator required?
If the load inadvertently or accidentally lands, what course of action should be taken?
Which parts of the machine is the radius (for lifting) measured from?

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CP CONSTRUCTION PLANT
CS COMPETENCE SCHEME

Excavator 360 - Below 10 Tonnes A58
Lifting Operations only
Technical Test Theory Questions

What effect can a swinging load have on an excavator?
The safe working load (SWL) or working load limit (WLL) of a multi-leg chain sling only applies in what TWO conditions or configuration?
Accessories must only be attached to manufacturers' approved lifting points. Explain THREE possible consequences if the recommendations are not followed.
If the accessory attachment point is not part of the bucket, give TWO reasons why it should be removed.
If the machine's rated capacity/object handling capacity chart is not available for reference, what other methods can be used to determine the machine's lifting capacity?
Why should long loads be lifted using a swivelling type lifting accessory?
When an object is needed to be lifted on a site, what should be the first consideration?
If a hook is fitted to the machine for lifting purposes, what must be checked before use?
What needs to be inspected on a quick-hitch coupler if attaching lifting accessories for the lifting of slung loads?

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Excavator 360 above 10 Tonnes A59
Technical Test Theory Questions

Name THREE ways that a plant operator can contribute towards repeat business with the client or principal contractor.
What is the meaning of this hand signal (being demonstrated by the tester)?
What information does the ‘dig-envelope’ (also known as ‘working range’) chart give? (Candidates may be shown a copy of a chart.)
If the machine's rated capacity/object handling capacity chart is not available for reference, what other method can be used to determine the machine's lifting capacity?
What is the definition of, or how can a hazard be described?
Why should long loads be lifted using a swivelling type lifting accessory?
a) What is the purpose of a method statement? b) What is required of the operator?
Give TWO reasons why, wherever possible, operators should excavate the ground in layers.
If checking the oil level using a dipstick, why must gloves be worn?
Where should the excavator’s operator’s manual be kept and why?
If setting up to work in a pedestrianised area, state THREE factors that need to be taken into account.
In what situation does a hard hat NOT need to be worn when operating a 360 excavator?
What THREE main duties of the Health and Safety at Work etc. Act must employees follow?
When an object needs to be lifted on a site, what should be the first consideration?
State the purpose of the check valve(s) located on the boom cylinder rams.

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Excavator 360 above 10 Tonnes A59 Technical Test Theory Questions

Why are plant operators generally regarded as 'safety-critical' workers?
Give THREE reasons why an oversize bucket should NOT be used when excavating trenches to specification.
With regards to lifting accessories, irrespective of who supplied the accessories, what THREE factors should be ensured before the accessories are used?
The operator is asked to excavate a new trench. State FIVE different requirements that must be considered or implemented before work commences.
Accessories must only be attached to manufacturer's approved lifting points. Explain three possible consequences if the recommendations are not followed.
The operator has to fit and use a new bucket using a quick-hitch coupler that they are unfamiliar with. What do Regulations (such as PUWER 98) and other guidance require the operator to have?
Cable avoidance tools (CATs) can detect a variety of buried services. What type of material do they have limitations in locating?
Explain ALL visual checks that must be carried out on all types of quick-hitch, bucket-attaching systems before use.
If a hook is fitted to the machine for lifting purposes, what must be checked before use?
a) What is the recommended minimum distance to keep from overhead power lines, mounted on wooden poles, when setting up the machine? b) Explain why a distance should be kept.
If both travel levers (or travel pedal for wheeled machines) are pushed forwards when the track motors (or driving wheels) are in front of the cab, in which direction would the machine move?
When parking the machine at the end of the shift, name THREE places where the machine should NOT be parked.
Using the lifting capacity diagram for A59: a) if the machine is equipped with a 2.5 m long dipper, what is the maximum lifting capacity in tonnes at a 6 m radius/reach over the sides of the track with the load at 3 m height b) in principle, if a longer dipper is fitted, what effect does that have on the lifting capacity (assuming same size bucket and machine configuration)?
Why should different soils be segregated when excavating?
If the operator has to top up the hydraulic oil, state TWO precautions to ensure cleanliness of the system.

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Excavator 360 above 10 Tonnes A59 Technical Test Theory Questions

If a yellow-coloured marker tape is unearthed during excavating, which TWO types of service could this indicate?
Explain the purpose of a lift plan.
Using the operator's manual, state the cold-starting procedure for the machine. **Note:** The operator's manual for the machine being used for the test MUST be available for reference by the candidate.
Give TWO examples of where The Work at Height Regulations may apply to 360 excavator operations.
What makes up the total (or gross) weight of a load that is to be lifted?
Why is it important that the bucket/attachment is lowered and engine switched off before the operator exits the cab?
Name FOUR different types or levels of disciplinary actions or sanctions that can be applied (by employers and judicial bodies) to operators of plant who do not comply with or follow legislation and regulations.
If the accessory attachment point is not part of the bucket, give TWO reasons why it should be removed
Apart from the operator, who else may need to use the machine's operator's manual?
When must a banksman/signaller be used before moving an excavator?
Describe a physical method of checking that a bucket is fully secured to the quick-hitch coupler prior to work.
If the operator has loaded the machine onto a transporter/trailer on behalf of a driver, what checks must be carried out before they leave the cab?
Manufacturers' lifting or object handling capacity charts apply (in all known cases) when the machine is level. What is the effect if a load is lifted or travelled, facing downhill, on a downhill slope?
What is the main purpose of a rated capacity indicator (RCI) or load moment indicator (LMI)?
Using the operator's manual, state the figure for setting track tension. For wheeled units, state the tyres' operating pressure. **Note:** The operator's manual for the machine being used for the test MUST be available for reference by the candidate.

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Excavator 360 above 10 Tonnes A59 Technical Test Theory Questions

The safe working load (SWL) or working load limit (WLL) of a multi-leg chain sling only applies in what TWO conditions or configurations?
How can a qualification or card benefit a plant operator?
The operator has been asked to drive the machine onto a transporter/trailer. a) Who is responsible for the loading operations? b) State FOUR actions to be considered by the operator before loading commences.
What is the nearest distance allowed to gas pipes when excavating with the machine?
If travelling with a load, name FIVE factors that must be taken into account by the operator before moving.
What factors determine the shoring requirements of a trench?
Describe TWO actions to be taken for an open trench at the end of a working day.
What is the purpose of a roll or ROPS frame?
What is the purpose of the counterweight of the machine?
Who determines the lifting/object handling capacity of the machine?
Why must excavator operators not begin to load vehicles until the forward-tipping dumper driver is clear of their machine?
If the load inadvertently or accidentally lands, what course of action should be taken?
On a semi-automatic, quick-hitch, bucket-attaching system: a) what is the purpose of the safety pin b) what checks MUST be made to the pin before use?
What needs to be inspected on a quick-hitch coupler when attaching lifting accessories to lift slung loads?
What are the possible outcomes of prosecution for not complying with legislation and regulations?
What does the Health and Safety at Work etc. Act require employers to do, specifically regarding plant?

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Excavator 360 above 10 Tonnes A59
Technical Test Theory Questions

If a trench has a depth of 2 m: a) what is the minimum distance to maintain from the edge of the trench when placing spoil? b) Explain why.
Why must the controls be isolated before each load can be attached or disconnected by the slinger?
List SIX typical subject areas that should be covered in a site induction.
On both tracked and wheeled types: a) what differs between lifting over the side, compared to over the front or the rear of the machine? b) Explain why.
What particular and specific hazards can affect the stability of the machine when working on old, industrial (brownfield) sites?
What is the purpose of a risk assessment?
When working in a confined area or space: a) what danger can be present with regards to the counterweight of the machine b) when should measures be taken c) what measures should be implemented?
Why should an excavator be re-fuelled at the end of the day?
What is regarded as the danger or hazard zone during a lifting operation?
Before manually changing any bucket: a) where should the bucket be positioned (in relation to the ground) before removing the final pin? b) Why?
Name THREE ways in which an operator can minimise their impact upon the environment whilst using the machine.
Which parts of the machine is the radius (for lifting) measured from?
Why must the seatbelt be worn, even with the cab door closed?
What effect can a swinging load have on an excavator?
Give FOUR reasons that may cause the machine to tip over – forwards and/or sideways.

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Excavator 360 above 10 Tonnes A59
Technical Test Theory Questions

If setting up to excavate in a confined area, name TWO things that should be taken into account before starting.
Before lowering into or moving a drag box into a trench, what trench-related checks must be made?
If attaching accessories to a quick-hitch coupler, give TWO reasons why the coupler should be tilted in the downwards position (ram extended)?
Name TWO types of equipment used to ensure that excavation levels, measurements and positions are to the required specification.
a) Why should the slewing direction be to the left wherever possible? b) Explain why?
Before leaving the cab for a rest break, after parking and switching off the machine, what final action must be carried out?
If the excavator is carrying out deep excavating work using the full working range, what hazard may occur?
When slewing with a load, where should the operator be looking?
If the machine is being travelled or working on the public highway, including adjacent pavements and verges, the Road Traffic Act applies. a) What type of licence and which classes should the operator hold? b) What is the minimum age allowed?
According to legislation, when are check valves and a rated capacity or load moment indicator required?
During work, the engine starts to overheat. Explain the danger if someone tries to remove the radiator or expansion tank cap.

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Excavator 360 above 10 Tonnes A59
Lifting Operations only
Technical Test Theory Questions

Who determines the lifting/object handling capacity of the machine?
Accessories must only be attached to manufacturers' approved lifting points. Explain THREE possible consequences if the recommendations are not followed.
According to legislation, when are check valves and a rated capacity or load moment indicator required?
Before lowering into or moving a drag box into a trench, what trench-related checks must be made?
Explain the purpose of a lift plan.
If a hook is fitted to the machine for lifting purposes, what must be checked before use?
If attaching accessories to a quick-hitch coupler, give TWO reasons why should the coupler be tilted in the downwards position (ram extended)?
If the accessory attachment point is not part of the bucket, give TWO reasons why it should be removed.
If the load inadvertently or accidentally lands, what course of action should be taken?
If the machine's rated capacity/object handling capacity chart is not available for reference, what other methods can be used to determine the machine's lifting capacity?
If travelling with a load, name FIVE factors that must be taken into account by the operator before moving.
Manufacturers' lifting or object handling capacity charts apply (in all known cases) when the machine is level. What is the effect if a load is lifted or travelled facing downhill on a downhill slope?
On both tracked and wheeled types: a) what differs between lifting over the side compared to over the front or the rear of the machine? b) Explain why.
The safe working load (SWL) or working load limit (WLL) of a multi-leg chain sling only applies in what TWO conditions or configuration?

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Excavator 360 above 10 Tonnes A59
Lifting Operations only
Technical Test Theory Questions

Using the lifting capacity diagram for A59: a) if the machine is equipped with a 2.5 m long dipper, what is the maximum lifting capacity in tonnes at a 6 m radius/reach over the sides of the track with the load at 3 m height b) in principle, if a longer dipper is fitted, what effect does that have on the lifting capacity (assuming same size bucket and machine configuration)?
What effect can a swinging load have on an excavator?
What is regarded as the danger or hazard zone during a lifting operation?
What is the main purpose of a rated capacity indicator (RCI) or load moment indicator (LMI)?
What makes up the total (or gross) weight of a load that is to be lifted?
What needs to be inspected on a quick-hitch coupler if attaching lifting accessories for the lifting of slung loads?
When an object is needed to be lifted on a site, what should be the first consideration?
When slewing with a load, where should the operator be looking?
Which parts of the machine is the radius (for lifting) measured from?
Why must the controls be isolated before each load can be attached or disconnected by the slinger?
Why should long loads be lifted using a swivelling type lifting accessory?
With regards to lifting accessories, irrespective of who supplied the accessories, what THREE factors should be ensured before the accessories are used?

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What is the definition of, or how can a hazard be described?
What is the purpose of a risk assessment?
List SIX typical subject areas that should be covered in a site induction.
What THREE main duties of The Health and Safety at Work Act must employees follow?
What does The Health and Safety at Work Act require employers to do with regards specifically to plant?
a) What is the purpose of a Method Statement and b) what is required of the operator?
Name FOUR different types or levels of disciplinary actions or sanctions that can be applied (by employers and judicial bodies) to operators of plant who do not comply with, or follow legislation and regulations.
Why are crane operators generally regarded as ‘safety-critical’ workers?
Name THREE ways in which an operator can minimise their impact upon the environment whilst using the machine.
State the functions or job role of the following personnel: a) Appointed Person, b) Crane Supervisor, c) Slinger, d) Signaller
In what situation does a hard hat NOT need to be worn when operating a mobile crane?
The operator has to use a new model of mobile crane that they are unfamiliar with. What do Regulations (i.e. LOLER 98) and other guidance require the operator to have?
What are the possible outcomes of facing prosecution for not complying with legislation and regulations?
Give TWO examples of where The Work at Height Regulations may apply to mobile crane operations.
How can a qualification or card benefit a crane operator?

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Mobile Crane A60
Technical Test Theory Questions

Name THREE ways that a crane operator can contribute in ensuring repeat business with the client or principal contractor.
Where should the Operator's Manual be kept and why?
What is the difference between a contract lift and a 'standard' crane hire?
Crane operations fall within the scope of the Lifting Operations and Lifting Equipment Regulations (LOLER) 1998. Name TWO requirements of the regulations with regards to lifting.
a) What is meant by the lifting capacity of the crane and b) who determines it?
What is the purpose of a roll or ROPS frame?
What are the THREE actions or stages that a crane operator undertakes during pre-use inspections?
Using the Operator's Manual, state the figure for the tyre pressures. **Note**: The Operator's Manual for the machine being used for the test MUST be available for reference by the candidate.
Using the Operator's Manual, state the cold-starting procedure for the crane (can be the drive engine or auxiliary engine). **Note**: The Operator's Manual for the machine being used for the test MUST be available for reference by the candidate.
What is the purpose of the hoisting limit switch (also known as the 'chandelier')?
What is meant by the footprint of the crane?
Which parts of the crane is the radius (for lifting) measured from?
If checking the oil level using a dipstick, why must gloves be worn?
Apart from the operator, who else may need to use the machine's Operator's Manual?
What is the purpose of counterweight(s) on the crane?

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a) How does the number of lines or falls of rope affect the lifting capacity for the crane and b) how is hoist speed affected when the number of lines (or falls of rope) is reduced?
When would a fly jib or lattice extension be fitted and used?
During work, the engine starts to overheat. Explain the danger if someone tries to remove the radiator or expansion tank cap.
As a lifting machine, the crane must be thoroughly examined. a) What is the purpose of the examination and b) who would carry out the examination?
If the crane has to travel on the public highway, the Road Traffic Act applies. a) What type of licence and which classes should the operator hold and b) what is the minimum age allowed?
a) What is the minimum distance allowed near open trenches when travelling the crane and b) explain why.
When must a banksman or signaller be used before moving a crane?
Why must the seat belt be worn, even with the cab door closed?
If asked to travel with a suspended load, name FIVE factors that must be taken into account by the operator before moving.
a) Which part of the crane applies loading or pressure to the ground and b) name TWO ways that pressure can be reduced.
If a load of 40 tonnes is lifted on four falls or lines of rope, what is the tension in each fall or line?
Wind speeds can be variable throughout the working day. What action must be taken to ensure safe working conditions are maintained?
What is the main purpose of the Rated Capacity Indicator (RCI)?
When working in a confined area or space: a) what danger can be present with regards to the counterweight of the machine, b) when should measures be taken and c) what measures should be implemented?
If setting up to lift loads in a pedestrianised area, state THREE factors that need to be taken into account.

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Mobile Crane A60
Technical Test Theory Questions

a) What is the recommended minimum distance to be kept away from overhead power lines mounted on metal pylons when setting up the machine and b) explain why a distance should be kept.
On a busy construction site, how should the slinger/signaller be identified to the crane operator?
a) Who only can authorise partial outrigger extensions and b) what is the effect on lifting capacity by partially extending the outriggers?
The safe working load or working load limit (SWL/WLL) of a multi-leg chain sling only applies in what TWO conditions or configuration?
The number of falls has been changed on the hook block. How has this action affected the RCI?
Name TWO things that happen if the hoist rope is not vertical when lifting a load.
Give FOUR reasons that may cause the crane to overturn.
When slewing with a load, where should the operator be looking?
If radios are to be used during the lifting operations, what FIVE actions and checks must be made by the crane operator before use?
What makes up the total (or gross) weight of a load that is to be lifted?
Using the lifting capacity diagram for A60 a) what is the maximum lifting capacity, b) what boom extension is required for a load weighing 7.6 tonnes needed to be placed at 15 metres radius and c) what counterweight is required?
Name TWO ways that wet weather can affect lifting operations.
As the crane rotates through 360 degrees with a load, what happens to the loading on each outrigger or wheel?
What effect can a swinging load have on a crane?
An operator has been asked to pick and carry a load down a small section of the public highway, for which The Road Traffic Act applies. What effect does this have on crane operations?

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During the lifting operation, part of the task cannot be carried out as detailed in the lift plan. a) What initially must happen to the lifting operation and b) who authorises any changes?
Name THREE ways in which wind speed can affect the lifting operation.
If a load is slewed rather quickly, what TWO initial effects does it have on the load whilst slewing?
If the words STOP NOW are given to the crane operator by radio during the lift, what action must the operator take?
Only two legs of an 8 tonne four-legged chain sling are being used. What is the maximum load that can be lifted?
If a load is being slewed too fast for its size, what TWO factors must the operator and signaller take into account?
How does the deflection of the boom or jib affect lift?
What is the meaning of this hand signal (being demonstrated by the Tester)?
If the hook block inadvertently (accidentally) lands, what course of action should be taken?
Two cranes are working in the same vicinity that encroach the operating radius of each. What actions would the lift plan or method statement normally specify?
Before leaving the cab for a rest break, after parking and switching off the machine, what final action must be carried out?
When parking the machine at the end of the shift, name THREE places where the machine should NOT be parked.
Why should the crane be re-fuelled at the end of the day?

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Appointed Person A61
Technical Test Theory Questions

Explain the difference between an employing and user organisation.
State why there must be a safe system of work.
Name TWO duties of the crane operator.
Name FOUR items that must be recorded when a thorough examination on a lifting appliance has been carried out.
What is the Factor of Safety when lifting personnel?
Who has overall control of the lifting operation?
When a crane company hires out a crane, name TWO main legal requirements the hire company must meet regarding the crane and driver.
To whom should the appointed person give all details involving the lifting operation?
Who is responsible for providing the contractor with written details of the work to be done?
Name TWO possible penalties for not following legal requirements when using a crane.
Which part of BS 7121 is specific to mobile cranes?
State which bodies have to be notified when planning a lift on or near by: a) rivers, b) airfields, c) highways, d) railways, e) live plant.
What is the definition of a competent person as stated by Codes of Practice?
State ONE difference between a regulation and a Code of Practice.
What types of crane are not covered by BS 7121?

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State the legislation and the regulation therein that refers to the stability of cranes.
What is the main aim of the HASWA 1974?
Name two possible penalties for not following legal requirements when using a crane.
What does The Health and Safety at Work Act require employers to do with regards specifically to plant?
What is the minimum recommended distance that is allowed between the counterweight(s) of the crane and another object/structure?
Explain the purpose of the over-hoist limit switch.
Name THREE factors that determine the safe working load of the crane.
What is a Load Radius Indicator?
Define the term ‘Radius’.
Describe how to calculate the area of support beneath a crane outrigger, which gives maximum possible safeguards against ground subsidence.
If a crane is out of level, what effect will it have on the radius?
To lift a load of 12 tonnes on a two point lift using single leg slings, what is the required SWL (WLL) for each sling with an included angle of 87 degrees? Please explain your calculation.
In what application have single leg slings been rated with their SWL (WLL)?
When and why are axle or suspension locks fitted to most mobile cranes?
What advantage is there by increasing the number of falls on a hook block?

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What does the term ‘structural strength’ relate to with regard to the lifting capacity of the crane?
Why should standard counterweights remain on their chassis location if not required for a particular lifting configuration
What are the types of warning that an RCI will indicate, and at what point are they activated?
a) Where must the load radius diagram on a tower crane be located and b) what information must it contain?
How does the deflection of the boom on a mobile crane or jib affect lift?
State the maximum recommended angle for single leg slings when used as a pair.
List FOUR items to be found on a chain sling inspection certificate.
Name a design of accessory hook that is exempt from being fitted with a safety catch.
What is the maximum angle a bow shackle used as a pair on a crane hook can be used at?
How long is a thorough examination for a lifting accessory valid for?
How is the SWL/WLL/rated capacity for multi-legs slings determined?
Give TWO methods of obtaining the centre of gravity on an unbalanced load.
If a load of 20 tonnes is lifted on four falls of rope, what is the tension in each fall?
Name three markings found on multiple leg slings.
State the approximate sling angle if the distance between the lifting points is one and a half times the leg length.

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What is the Factor of Safety for chains?
If radios are to be used during the lifting operations, what FIVE actions and checks must be made before use?
Using simple graphics draw the recommended hand signals for: a) emergency stop and b) hoist up.
Why is it recommended to complete a report after the completion of the lifting operation?
State the safe procedure to be followed before lifting or lowering a load down a shaft or excavation.
State SIX environmental factors that can affect an external lifting operation.
Why must a crane driver never try and ‘drag’ a load?
List TWO methods of obtaining the accurate weight of a load.
Identify FOUR requirements for ensuring the stability of mobile cranes on site.
Give THREE examples of how excessive rain can affect an external lifting operation when using a mobile crane.
A replacement crane driver has been supplied to continue the lift. What must they be made aware of before further lifting can take place?
During dismantling operations, what is the recommended percentage of de-rating if lifting a load from height where the weight has been estimated?
Give one reason why it is not advised to lift a single load using the fly hook block and main hook block.
Name the section in BS 7121 where advice is given if carrying out ’free-on-wheels’ duties.
Explain the additional requirements of a standard lift over a basic lift.

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With a bearing load of 14,000 kg and an outrigger base of 1m square, what would be the resultant ground pressure in kg?
Define the term ‘outreach’.
What does LOLER (specifically the regulations) require for the lifting of persons?
Where a scale drawing is being used, if the scale used is 1:200, what is the 1 cm equivalent to?
If planning to lift loads in or near a pedestrianised area, what main factor needs to be taken into account?
a) What is the recommended minimum distance to be kept away from overhead power lines mounted on metal pylons and b) explain why a distance should be kept.
Two cranes are working in the same vicinity that encroach the operating radius of each. What actions should the lift plan or method statement normally specify?

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CP CONSTRUCTION PLANT CS COMPETENCE SCHEME

Crane/Lifting Operations Supervisor A62
Technical Test Theory Questions

Explain the difference between an employing and user organisation.
State why there must be a safe system of work.
Name TWO duties of the crane operator.
Name FOUR items that must be recorded when a thorough examination on a lifting appliance has been carried out.
What is the Factor of Safety when lifting personnel?
Who has overall control of the lifting operation?
When a crane company hires out a crane, name TWO main legal requirements the hire company must meet regarding the crane and driver.
To whom should the appointed person give all details involving the lifting operation?
Who is responsible for providing the contractor with written details of the work to be done?
Name TWO possible penalties for not following legal requirements when using a crane.
Which part of BS 7121 is specific to mobile cranes?
What is the definition of, or how can a hazard be described?
What is the purpose of a risk assessment?
List SIX typical subject areas that should be covered in a site induction.

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CP CONSTRUCTION PLANT CS COMPETENCE SCHEME

Crane/Lifting Operations Supervisor A62
Technical Test Theory Questions

What THREE main duties of The Health and Safety at Work Act must employees follow?
What does The Health and Safety at Work Act require employers to do with regards specifically to plant?
a) What is the purpose of a Method Statement and b) what is required of the operator?
Name FOUR different types or levels of disciplinary actions or sanctions that can be applied (by employers and judicial bodies) to operators of plant who do not comply with, or follow legislation and regulations.
The operator has to use a new model of crane that they are unfamiliar with. What do Regulations (i.e. LOLER 98) and other guidance require the operator to have?
What are the possible outcomes if facing prosecution for not complying with legislation and regulations?
What do The Work at Height Regulations require of crane supervisors?
How can a qualification or card benefit a crane supervisor?
What is the difference between a contract lift and a ‘standard’ crane hire?
If the operator has to leave the cab of a crane for a short period, state at least TWO actions that must be taken before they leave.
What is the minimum recommended distance that is allowed between the counterweight(s) of the crane and another object/structure?
What advantage is there by increasing the number of falls on a hook block?
Explain the purpose of the over-hoist limit switch.
Name THREE factors that determine the safe working load of the crane.

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Crane/Lifting Operations Supervisor A62
Technical Test Theory Questions

Why is it important to ensure the wheels are clear of the ground when outriggers are employed?
What is a Load Radius Indicator?
Define the term ‘Radius’.
Describe how to calculate the area of support beneath a crane outrigger, which gives maximum possible safeguards against ground subsidence.
If a crane is out of level, what effect will it have on the radius?
What are the types of warning that an RCI will indicate?
To lift a load of 12 tonnes on a two point lift using single leg slings, what is the required SWL (WLL) for each sling with an included angle of 87 degrees? Please explain your calculation.
In what application have single leg slings been rated with their SWL (WLL)?
When and why are axle or suspension locks fitted to most mobile cranes?
According to BS 7121 part 1: a) what is the minimum number of allowable turns on the hoist drum and b) who decides the actual minimum for a given model of crane?
Name THREE ways in which an operator can minimise their impact upon the environment whilst using a crane.
Name THREE ways that a crane supervisor can contribute in ensuring repeat business with the client or principal contractor.
Where should the crane’s Operator’s Manual be kept and why?
a) What is meant by the lifting capacity of the crane and b) who determines it?

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CP CONSTRUCTION PLANT CS COMPETENCE SCHEME

Crane/Lifting Operations Supervisor A62
Technical Test Theory Questions

What are the THREE actions or stages that a crane operator undertakes during pre-use inspections?
a) On a tower crane, where must the load radius diagram be located and b) what information must it contain?
A tower crane has been delivered to site, assembled and configured for lifting. What must be carried out before lifting starts and by whom?
Name FIVE requirements that must be followed if accessing the end of the jib for maintenance purposes.
How does the deflection of the boom on a mobile crane or jib affect lift?
State the maximum recommended angle for single leg slings when used as a pair.
List FOUR items to be found on a chain sling inspection certificate.
Name a design of accessory hook that is exempt from being fitted with a safety catch.
What is the maximum angle a bow shackle used as a pair on a crane hook can be used at?
How long is a thorough examination for a lifting accessory valid for?
How is the SWL/WLL/rated capacity for multi-leg slings determined?
Give TWO methods of obtaining the centre of gravity on an unbalanced load.
If radios are to be used during the lifting operations, what FIVE actions and checks must be made before use?
What is the meaning of this hand signal (being demonstrated by the Tester)?

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Crane/Lifting Operations Supervisor A62
Technical Test Theory Questions

State the safe procedure to be followed before lifting or lowering a load down a shaft or excavation.
State SIX environmental factors that can affect an external lifting operation.
Why must a crane driver never try and ‘drag’ a load?
List TWO methods of obtaining the accurate weight of a load.
Identify FOUR requirements for ensuring the stability of mobile cranes on site.
Give THREE examples of how excessive rain can affect an external lifting operation when using a mobile crane.
A replacement crane driver has been supplied to continue the lift. What must they be made aware of before further lifting can take place?
If setting up to lift loads near a pedestrianised area, what main factor needs to be taken into account?
a) What is the recommended minimum distance to be kept away from overhead power lines mounted on metal pylons and b) explain why a distance should be kept.
If a heavy load is being slewed at too a high speed over at least 180 degrees, what TWO factors must the operator and signaller take into account?
Two cranes are working in the same vicinity that encroach the operating radius of each. What actions would the lift plan or method statement normally specify?
If a mobile crane on blocked duties is slewing through 180 degrees and is unladen, what can cause a change of ground loading in each stabiliser.
During the lifting operation, part of the task cannot be carried out as detailed in the lift plan. a) What initially must happen to the lifting operation and b) who authorises any changes?

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Pedestrian Operated Tower Crane A63 Technical Test Theory Questions

What is the definition of, or how can a hazard be described?
What is the purpose of a risk assessment?
List SIX typical subject areas that should be covered in a site induction.
What THREE main duties of The Health and Safety at Work Act must employees follow?
What does The Health and Safety at Work Act require employers to do with regards specifically to plant?
a) What is the purpose of a Method Statement and b) what is required of the operator?
Name FOUR different types or levels of disciplinary actions or sanctions that can be applied (by employers and judicial bodies) to operators of plant who do not comply with, or follow legislation and regulations.
Why are crane operators generally regarded as ‘safety-critical’ workers?
Name THREE ways in which an operator can minimise their impact upon the environment whilst using the machine.
State the functions or job role of the following personnel: a) Appointed Person, b) Crane Supervisor, c) Slinger, d) Signaller
The operator has to use a new model of POTC that they are unfamiliar with. What do Regulations (i.e. LOLER 98) and other guidance require the operator to have?
What are the possible outcomes of facing prosecution for not complying with legislation and regulations?
What do The Work at Height Regulations require of crane operations.
How can a qualification or card benefit a crane operator?
Name THREE ways that a hired-in crane operator can contribute in ensuring repeat business with the client or principal contractor.

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Pedestrian Operated Tower Crane A63 Technical Test Theory Questions

Where should the Operator's Manual be kept and why?
What is the difference between a contract lift and a 'standard' crane hire?
a) Where must the load radius diagram be located and b) what information must it contain?
a) What is meant by the lifting capacity of the crane and b) who determines it?
What are the THREE actions or stages that a crane operator undertakes during pre-use inspections?
Using the Operator's Manual or other, state the procedure for changing the number of falls on the hook block. **Note**: The Operator's Manual for the machine being used for the test MUST be available for reference by the candidate.
Using the Operator's Manual or other, state the maximum wind speed the crane may be operated in. **Note**: The Operator's Manual for the machine being used for the test MUST be available for reference by the candidate.
What prevents the hook block from contacting the jib pulley?
A POTC has been delivered to site, assembled and configured for lifting. What must be carried out before lifting starts and by whom?
Which parts of the crane is the radius (for lifting) measured from?
Name TWO advantages of using a POTC over other forms of lifting equipment.
Apart from the operator, who else may need to use the machine's Operator's Manual?
What is the purpose of counterweight(s) on the crane?
a) How does the number of lines or falls of rope affect the lifting capacity for the crane and b) how is hoist speed affected when the number of lines (or falls of rope) is reduced?
a) What checks should be made to the ground conditions and b) when should the checks be made?

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Pedestrian Operated Tower Crane A63 Technical Test Theory Questions

What is the purpose of the flags situated on the jib?
What checks should be made to the transmitter of a remote-controlled POTC before work?
On inclined jib types, what must be undertaken after the jib is inclined?
If assisting in erecting a POTC, why is it important that the manufacturer's procedures are followed precisely?
If a load of 8 tonnes is lifted on two falls or lines of rope, what is the tension in each fall or line?
If the legs of a chain sling are more than 90 degrees apart from each other, what happens to the SWL?
What information is needed when estimating the weight of a load?
Wind speeds can be variable throughout the working day. What action must be taken to ensure safe working conditions are maintained?
What is the main purpose of the Rated Capacity Indicator (RCI)?
What do the words SWL, as stamped on lifting accessories, signify?
If setting up to lift loads in a pedestrianised area, what main factor needs to be taken into account?
a) What is the recommended minimum distance to be kept away from overhead power lines mounted on wooden poles when setting up the crane and b) explain why a distance should be kept.
What is meant by centre of gravity, or how is the centre of gravity determined, on a load to be lifted?
On a busy construction site, if required, how would the slinger/signaller be identified to the crane operator?
The number of falls has been changed on the hook block. How has this action affected the RCI?

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Pedestrian Operated Tower Crane A63 Technical Test Theory Questions

The safe working load or working load limit (SWL/WLL) of a multi-leg chain sling only applies in what TWO conditions or configuration?
Name TWO things that happen if the hoist rope is not vertical when lifting a load.
Apart from lifting using the hook, what other type of work can POTCs undertake?
What is jib deflection and when does it occur?
If radios are to be used during the lifting operations, what FIVE actions and checks must be made by the crane operator before use?
What would happen if the operator faces the crane whilst using remote control?
Name TWO ways that wet weather can affect lifting operations.
What makes up the total (or gross) weight of a load that is to be lifted?
a) When is a trial lift carried out and b) name THREE checks to be made.
Using the lifting capacity diagram for A63 - with a jib length of 33 metres: a) what is the maximum possible lifting capacity in tonnes, b) what is the lifting capacity at 20.0 metres radius using four falls of rope and c) what is the difference in maximum lifting capacity between a two falls hook block and a four falls hook block in two falls mode?
What effect can a swinging load have on a crane?
During the lifting operation, part of the task cannot be carried out as detailed in the lift plan. a) What initially must happen to the lifting operation and b) who authorises any changes?
What problems can be created when operating the crane in high-speed drive?
Name THREE ways in which wind speed can affect the lifting operation.
If a load is slewed rather quickly, what TWO initial effects does it have on the load whilst slewing?

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Pedestrian Operated Tower Crane A63 Technical Test Theory Questions

When slewing with a load, where should the operator be looking?
If the words STOP NOW are given to the crane operator by radio during the lift, what action must the operator take?
Only two legs of an 8 tonne four-legged chain sling are being used. What is the maximum load that can be lifted?
If a load is slewed too fast for its size, what TWO factors must the operator (and signaller) take into account?
If the hook block inadvertently (accidentally) lands, what course of action should be taken?
Two cranes are working in the same vicinity that encroach the operating radius of each. What actions would the lift plan or method statement normally specify?
What is the meaning of this hand signal (being demonstrated by the Tester)?
During a rest break, or leaving the crane for a short period, what action should be taken for the control box?
When would a load require netting?
At the end of the shift: a) in what position should jibs and trolleys be left in and b) why?
At the end of the shift: a) what THREE security measures should be applied and b) why?

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Compact Crane A66
Technical Test Theory Questions

What is the definition of, or how can a hazard be described?
What is the purpose of a risk assessment?
List SIX typical subject areas that should be covered in a site induction.
What THREE main duties of The Health and Safety at Work Act must employees follow?
What does The Health and Safety at Work Act require employers to do with regards specifically to plant?
a) What is the purpose of a Method Statement and b) what is required of the operator?
Name FOUR different types or levels of disciplinary actions or sanctions that can be applied (by employers and judicial bodies) to operators of plant who do not comply with, or follow legislation and regulations.
Why are crane operators generally regarded as ‘safety-critical’ workers?
Name THREE ways in which an operator can minimise their impact upon the environment whilst using the machine.
State the functions or job role of the following personnel: a) Appointed Person, b) Crane Supervisor, c) Slinger, d) Signaller
In what situation does a hard hat NOT need to be worn when operating a compact crane?
The operator has to use a new model of compact crane that they are unfamiliar with. What do Regulations (i.e. LOLER 98) and other guidance require the operator to have?
What are the possible outcomes of facing prosecution for not complying with legislation and regulations?
How can a qualification or card benefit a crane operator?
Name THREE ways that a hired-in crane operator can contribute in ensuring repeat business with the client or principal contractor.

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Compact Crane A66
Technical Test Theory Questions

Where should the Operator's Manual be kept and why?
What is the difference between a contract lift and a 'standard' crane hire?
a) What is meant by the lifting capacity of the crane and b) who determines it?
What is the purpose of a roll or ROPS frame?
What are the THREE actions or stages that a crane operator undertakes during pre-use inspections?
Using the Operator's Manual, state the figure for the tyre pressures or checks to be made to the track belts. **Note**: The Operator's Manual for the machine being used for the test MUST be available for reference by the candidate.
Using the Operator's Manual, state the cold-starting procedure for the crane. **Note**: The Operator's Manual for the machine being used for the test MUST be available for reference by the candidate.
What prevents the hook block from contacting the jib pulley?
What is meant by the footprint of the crane?
Which parts of the crane is the radius (for lifting) measured from?
If checking the oil level using a dipstick, why must gloves be worn?
Apart from the operator, who else may need to use the machine's Operator's Manual?
What is the purpose of counterweight(s) on the crane?
a) How does the number of lines or falls of rope affect the lifting capacity for the crane and b) how is hoist speed affected when the number of lines (or falls of rope) is reduced?
When would a fly jib or extension be fitted and used?

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Compact Crane A66
Technical Test Theory Questions

During work, the engine starts to overheat. Explain the danger if someone tries to remove the radiator or expansion tank cap.
What checks should be made to the transmitter of a remote-controlled crane before work?
a) What is the minimum distance allowed near open trenches when travelling the crane and b) explain why.
When MUST a banksman or signaller be used before moving a crane?
Why must the seat belt be worn, even with a ROPS frame or cab?
If asked to travel with a suspended load, name FIVE factors that must be taken into account by the operator before moving
a) Which part of the crane applies loading or pressure to the ground and b) name TWO ways that pressure can be reduced.
If assisting in fitting a fly jib/extension to the crane, why is it important that the manufacturers procedures are followed precisely?
If a load of 5 tonnes is lifted on two falls or lines of rope, what is the tension in each fall or line?
Wind speeds can be variable throughout the working day. What action must be taken to ensure safe working conditions are maintained?
What is the main purpose of the Rated Capacity Indicator (RCI) or Load Moment Indicator (LMI)?
When working in a confined area or space: a) what danger can be present with regards to the counterweight of the machine, b) when should measures be taken and c) what measures should be implemented?
What do the letters SWL signify, as stamped on lifting accessories?
If setting up to lift loads in a pedestrianised area, state THREE factors that need to be taken into account.
a) If fitted, who only can authorise partial outrigger extensions and b) what is the effect on lifting capacity if partially extending the outriggers?

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a) What is the recommended minimum distance to be kept away from overhead power lines mounted on wooden poles when setting up the machine and b) explain why a distance should be kept.
On a busy construction site, how would the slinger/signaller be identified to the crane operator?
The safe working load (SWL) of a multi-leg chain slings only applies in what TWO conditions or configurations?
What information is needed when estimating the weight of a load?
On hoist rope cranes, the number of falls has been changed on the hook block. How has this action affected the RCI/LMI?
On mobile units, state the possible effect of lifting downhill on a slope.
Give FOUR reasons that may cause the crane to overturn.
If radios are to be used during the lifting operations, what FIVE actions and checks must be made by the crane operator before use?
What makes up the total (or gross) weight of a load that is to be lifted?
Using either chart A, B or C on the lifting capacity diagrams for A66A, B or C respectively. For A66D, use chart A66A. **For chart A** – a) what is the maximum lifting capacity, b) what is the maximum lift capacity at 10 metres radius and c) if a load of 1800 kg needs to be lifted to a height of 12 metres, what is the maximum available radius? **For chart B** – a) what is the maximum working height (to the nearest 0.2 metre), b) what is the maximum outreach (to nearest 0.2 metre) and c) on the first stage boom extension, what is the difference in kg when lowering from full raise to horizontal? **For chart C** – a) what is the maximum working height (to the nearest 0.2 metre), b) at what radius and height can a load of 0.3 tonnes be placed and c) what is the lift capacity at maximum reach?
a) When is a trial lift carried out and b) name THREE checks to be made.
If the hook block inadvertently (accidentally) lands, what course of action should be taken?

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Compact Crane A66
Technical Test Theory Questions

When working in a confined area or space, name THREE dangers that can be present.
During the lifting operation, part of the task cannot be carried out as detailed in the lift plan. a) What initially must happen to the lifting operation and b) who authorises any changes?
Name THREE ways in which wind speed can affect the lifting operation.
If a load is slewed (or turned) rather quickly, what TWO initial effects does it have on the load whilst slewing?
If the words STOP NOW are given to the crane operator by radio during the lift, what action must the operator take?
Name TWO things that happen if the hoist rope (or lifting accessories) is (are) not vertical when lifting a load.
On hoist rope units, if a heavy load is being slewed at high speed over at least 180 degrees, what TWO factors must the operator (and signaller) take into account?
As a slewing crane rotates through 360 degrees with a load, what happens to the loading on each outrigger?
What effect can a swinging load have on a crane?
Only one leg of a 4 tonne two legged chain sling is being used. What is the maximum load that can be lifted?
What is the meaning of this hand signal (being demonstrated by the Tester)?
Two cranes are working in the same vicinity that encroach the operating radius of each. What actions would the lift plan or method statement normally specify?
Before leaving for a rest break, after parking and switching off the machine, what final action must be carried out?
When parking the machine at the end of the shift, name THREE places where the machine should NOT be parked.
The operator has been asked to drive the machine onto a transporter/trailer. a) Who is responsible for the loading operations and b) state FOUR actions to be considered by the operator before loading commences.

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If applicable, why should the crane be re-fuelled at the end of the day?

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Tunnelling Locomotive A67
Technical Test Theory Questions

What is the definition of, or how can a hazard be described?
What is the purpose of a risk assessment?
List SIX typical subject areas that should be covered in a site induction.
What THREE main duties of the Health and Safety at Work Act must employees follow?
What does the Health and Safety at Work Act require employers to do with regards specifically to plant?
a) What is the purpose of a Method Statement and b) what is required of the operator?
Name FOUR different types or levels of sanctions that can be applied to plant operators who do not comply with, or follow legislation and regulations.
Plant operators are generally regarded as ‘safety-critical’ workers. What does this mean?
Name THREE ways in which an operator can minimise their impact upon the environment whilst using the machine.
In what situation does a hard hat NOT need to be worn when operating a tunnel locomotive?
The operator has to use a new type of tunnel locomotive that they are unfamiliar with. What do Regulations (i.e. PUWER 98) and other guidance require the operator to have?
What are the possible outcomes if being prosecuted for not complying with legislation and regulations?
Give TWO examples of where The Work at Height Regulations may apply to tunnel locomotives.
How can a qualification or card benefit a plant operator?
What is a tunnel locomotive operator’s main purpose or requirement?
Name THREE ways that a locomotive operator can contribute to ensuring repeat business with the client or main contractor.

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Tunnelling Locomotive A67
Technical Test Theory Questions

Where should the tunnel locomotive's Operator's Manual be kept and why?
What is a possible consequence when the flanges on the locomotive wheels are worn?
If the operator has to top-up the hydraulic oil, state TWO precautions to ensure cleanliness of the system.
Using the Operator's Manual, state the working release pressure for the air braking system (diesel) or the battery charge level (electric)
Using the Operator's Manual, state the shut down procedure for the locomotive.
Apart from the operator, who else may need to use the machine's Operator's Manual?
On start up, the air pressure on locomotive with pneumatic systems is low. What actions must the operator carry out before work and during work?
Name FIVE components which need to be checked prior to work commencing.
Name FOUR components and/or operating systems that are statutory required on a locomotive.
Should personnel be working within a live tunnel, what are the recommended safety precautions that should be in place to alert an oncoming locomotive operator?
Name THREE potential defects on a portable fire extinguisher found in a locomotive cab.
When reporting defects to either a locomotive and/or associated track, what TWO actions must a locomotive operator undertake?
What two types of information can a locomotive speedometer indicate?
Name FIVE control measures that need to be in place when personnel are working in a tunnel.
Give TWO reasons when a battery may need changing.
a) What are Pandrol clips used for and b) how many would be used on a standard steel/timber sleepers

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Tunnelling Locomotive A67
Technical Test Theory Questions

Name THREE types of defect that could affect locomotive stability
Name THREE features that a properly constructed crossing will have.
When may pre-use checks be carried out on a locomotive after it has been started?
According to guidance, when should service intervals be undertaken for locomotives in service?
At what haulage weight is a working speedometer required?
What actions can be undertaken to rails on a curve to stop them rolling on the tunnel lining?
Why are the couplings on rolling stock free to swivel?
Name THREE factors that can cause a lack of traction when moving away from rest.
a) Give ONE advantage and b) TWO disadvantages of rear mounted cameras.
Why should the limbs of the operator not exceed the confines of the cab when travelling?
When would the sandbox on a locomotive be used?
State THREE instances when a locomotive operator should sound an audible warning device
Give TWO purposes of showing a red light
What different forms of communication are used within a tunnel to safely control locomotive movements?
When uncoupling rolling stock, state the procedure that must be followed
If operating in the pit bottom, a) what warnings may need to be given and b) when must they be given?

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Tunnelling Locomotive A67
Technical Test Theory Questions

Who decides the positioning of the tunnel locomotive when being loading?
Give TWO reasons why the tunnel locomotive operator should have an understanding of the type of material being transported.
Name FOUR actions to be taken when approaching and passing personnel in a tunnel.
If approaching a crossing to traverse from one set of rails to another and one set of points is not fully closed, what actions should be taken?
What could be a consequence of travelling over a set of points that have not fully closed?
A locomotive is entering a curve and visibility is limited. What actions should the operator take?
What should be the first thing to be attached after coupling up any item of rolling stock
What is the recommended emergency stopping distance of a loaded train?
What is the procedure for moving off?
If all communications fail or visibility is lost when breasting a blind, what TWO actions must be taken?
Name THREE types of communication
a) What are the standard recognised traffic light signal colours when working underground and b) what does each signal colour indicate?
a) What are the FOUR standard horn signals when working underground and b) what does each signal signify?
What is the recommended minimum clearance between personnel and passing trains?
How many track bolts would be used to secure a standard set of fish plates to the rail and b) what would be the consequences of loose or missing track bolts
What distance should the front and rear lights be visible from?

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Tunnelling Locomotive A67
Technical Test Theory Questions

Guidance states that visibility from the operators cab should be sufficient to avoid the need for them to prevent what?
a) Couplings are subject to what THREE types of potential defects and b) what can cause premature failure of couplings?
When traversing in a tunnel, name THREE hazards that can occur.
Who is ultimately responsible for the safe transportation of loads that are placed into/onto the rolling stock?
What do the phrases 'inbye' and 'outbye' mean?
If two short sharp blasts are sounded on a horn, what does this indicate?
Where should a locomotive be positioned if no camera is fitted when hauling loads
What FOUR actions in the correct sequence should be taken in the event of a fire on a locomotive?
Name FOUR hazards that can occur with overhanging loads.
What is the sequence of actions should a locomotive start to skid?
Other than the braking system, name TWO safety devices used in a tunnel system to halt locomotives
Where is the safest position for a locomotive operator to be in when receiving loads
What are the actions for recovering a defective locomotive?
If a locomotive has derailed, who determines how and where it is to be repaired?
Who is permitted to shunt in the pit bottom area?
What is the emergency signal when driving?

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Tunnelling Locomotive A67
Technical Test Theory Questions

What determines the maximum speed for traversing across a set of points?
Explain the process for removing a broken down locomotive from a tunnel
What mechanical lifting equipment could be used for re-railment purposes?
What is the recommended spacing that emergency lights should not exceed?
What must be used when buffers on are not at the same height or type?
What are the additional requirements for an weekend shut down over an end of shift shutdown (where the differences are of over 12 hours)
Name FOUR materials or substances found on a typical locomotive that can contribute to a fire
Name TWO ways that an unattached item of rolling stock can be prevented from moving.
What can limit the number of diesel powered locomotives at any given times underground?
What is the process when a locomotive battery has to be changed?
When parking, where should the tunnel locomotive NOT be parked.
If a tunnel locomotive is fitted with a turbo-charged engine. a) What is the normal procedure before switching off the engine after working and b) what happens if the procedure is not followed?
Why should a tunnel locomotive be re-fuelled at the end of the day?
Where should the ignition key be kept when a locomotive is not is use?
What is the process for a) refuelling a diesel locomotive and b) what control measures need to be in place?
What is the minimum distance that any hot works/grinder operations etc. should be away from the fuelling point of any locomotive?

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Tunnelling Locomotive A67
Technical Test Theory Questions

a) Why should battery locomotives not be charged whilst underground and b) why?
When leaving a battery locomotive at the end of the shift, what TWO actions must the operator ensure?
Give TWO reasons why the cab should be kept clear of tools, rubbish etc.

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Plant Driving A68
Technical Test Theory Questions

What is the definition of, or how can a hazard be described?
What is the purpose of a risk assessment?
List SIX typical subject areas that should be covered in a site induction.
What THREE main duties of the Health and Safety at Work etc Act must employees follow?
What does the Health and Safety at Work etc Act require employers to do with regards specifically to plant?
a) What is the purpose of a Method Statement b) What is required of the driver?
Name FOUR different types or levels of sanctions that can be applied (by employers and judicial bodies) to plant drivers who do not comply with, or follow legislation and regulations.
Name THREE ways in which a driver can minimise their impact upon the environment whilst driving the machine.
In what situation does a hard hat not need to be worn when driving on a construction site?
The driver has to manoeuvre a new type of machine. What do Regulations (i.e. PUWER 98) and other guidance require the driver to have?
What are the possible outcomes if being prosecuted (by judicial bodies) for not complying with legislation and regulations?
Give TWO examples of where The Work at Height Regulations may apply to the driving of plant.
Why would the holding of a card be of benefit to the plant driver?
Where would the machine's Operator's Manual be found and why?
If the driver needs to top-up the hydraulic oil of a machine before it can be moved, state TWO precautions to ensure cleanliness of the system.

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Using the Operator's Manual, for tracked units, state how track tension should be set: for wheeled units, state the tyres' operating pressure or for rollers; state how the scraper bars should be set.
Using the Operator's Manual, state the cold-starting procedure for the machine.
What is the purpose of a roll or ROPS frame?
If checking the oil level using a dipstick, why must gloves be worn?
During work, the engine starts to overheat. Explain the danger if someone tries to remove the radiator or expansion tank cap.
On boom-equipped plant with an upper rotating structure, what TWO actions should be taken before slewing?
If the machine is being travelled on the public highway, including adjacent pavements and verges, the Road Traffic Act applies: a) What type of licence and which classes should the driver hold b) What is the minimum age allowed?
What is a possible consequence of driving wheeled plant where there was a deep cut in the sidewall of a tyre?
When MUST a banksman/signaller be used before moving any item of plant?
Why must the seat belt always be worn, even with the cab door closed?
What could be the effect on driving a machine whereby either a counterweight, boom or bucket had been removed?
Give THREE reasons that may cause the machine to tip over – forwards and/or sideways - whilst driving.
Give THREE possible reasons why drivers of plant should not stray off the designated travel routes on site.
When driving/manoeuvring plant in a confined area or space, what could be the risks?
If driving a machine in an area where the general public have access, what action should be taken?
If driving plant in an area where overhead power lines mounted on wooden poles are present: a) What is the minimum distance that must be kept? b) Explain why a distance should be kept.

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Plant Driving A68
Technical Test Theory Questions

If a trench has a depth of 2 metres: a) What is the minimum distance to maintain from the edge of the trench when travelling? b) Explain why.
What is the meaning of this hand signal (being demonstrated by the tester)?
When travelling on wet clay, what effect could this have on the machine, particularly on wheeled plant and rollers?
Manufacturers' must give recommendations on how to travel plant up and down inclines. If this information is not known first hand, what is the general rule about travelling up and down slopes?
Off road tyres have deep grooves or raised lugs: a) Explain the purpose of the raised lugs/grooves b) Explain what can happen to the machine when driving if the lugs or grooves are severely worn.
When steering wheeled plant with long rigid chassis around tight corners, what should be taken into account?
Before travelling, what TWO precautions need to be taking if travelling an item of plant fitted with a long boom and/or dipper length?
Making tight turns with tracked plant can cause what TWO effects?
If required to drive an item of plant on site for maintenance or loading purposes, what must be checked on arrival to the site?
Manoeuvring an articulated chassis plant in a restricted space requires what particular care?
When can additional personnel be transported around on site?
Before driving an item of plant (such as a dump truck) on a site where reversing may be involved, what should be checked before starting?
Before driving a machine away from rest, what final check must be made?
Before leaving the cab, what must be done before the engine is switched off?
Before leaving the cab and after switching off the machine, what final action must be carried out and why?
When parking the machine after use, name THREE places where the machine should NOT be parked.

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Soil Stabilisers A71
Technical Test Theory Questions

What is the definition of, or how can a hazard be described?
What is the purpose of a risk assessment?
List SIX typical subject areas that should be covered in a site induction.
What THREE main duties of the Health and Safety at Work Act must employees follow?
What does the Health and Safety at Work Act require employers to do with regards specifically to plant?
a) What is the purpose of a Method Statement and b) what is required of the operator?
Name FOUR different types or levels of sanctions that can be applied to plant operators who do not comply with, or follow legislation and regulations.
Plant operators are generally regarded as ‘safety-critical’ workers. What does this mean?
Name THREE ways in which an operator can minimise their impact upon the environment whilst using the machine.
Where required, in what situation does a hard hat NOT need to be worn when operating a soil stabiliser or spreader?
The operator has to use a new type of implement that they are unfamiliar with. What do Regulations (i.e. PUWER 98) and other guidance require the operator to have?
What are the possible outcomes if being prosecuted for not complying with legislation and regulations?
How can a qualification or card benefit a plant operator?
Name THREE ways that a plant operator can contribute in ensuring repeat business with the client or main contractor
Where should the soil stabiliser or spreaders Operator’s Manual be kept and why?
What is a possible consequence of using a tyre with a deep cut in the sidewall?

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Soil Stabilisers A71
Technical Test Theory Questions

If the operator has to top-up the transmission oil, state TWO precautions to ensure cleanliness of the system.
Using the Operator's Manual, state the figure for the tyres' operating pressure.
Using the Operator's Manual, state the cold-starting procedure for the machine.
If checking the oil level using a dipstick, why must gloves be worn?
Apart from the operator, who else may need to use the machine's Operator's Manual?
What is the purpose of a ROPS cab?
What is the difference between an integrated and non-integrated soil stabiliser?
When checking the connection of mounted units to the tractor, how should the safety/lynch pin be configured or fitted?
What speeds are the PTO shafts for towed units normally driven at?
During work, the engine starts to overheat. Explain the danger if someone tries to remove the radiator or expansion tank cap.
What is the most common method of driving the mixing rotor from the machine's gearbox/power source?
On a spreader, what is the purpose of metering the feed of material?
What sort of authorisation should be in place before starting incorporation activities?
On towed units, describe one application when the hand throttle can safely be used.
a) Name THREE purposes of the raised lugs on tyres and b) what can happen to a soil stabiliser or spreader if the lugs are severely worn?
What problems and hazards can soft ground cause to a soil stabiliser or spreader?

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Soil Stabilisers A71
Technical Test Theory Questions

a) On towed units, when should 4-wheel drive not be selected and b) explain why?
a) What is the minimum distance allowed near open trenches when travelling with a soil stabiliser and b) explain why?
When travelling on wet clay, what effect does this have on the soil stabiliser or spreader?
Why must the seat belt be worn at all times, even with the cab door closed?
Give THREE possible reasons why a soil stabiliser or spreader should not stray off the designated travel routes.
On integrated units, a) what danger can occur if travelling whilst fully loaded on a slope and b) explain why?
Name at least TWO conditions that are likely to cause instability of integrated stabilisers.
In what applications would the 'crab steering mode' be used for?
If travelling over binder, what TWO precautions need to be taken?
a) If setting up to work near to the general public and/or other site workers, state THREE factors that need to be taken into account and b) what measure need to be put in place to minimise those factors.
If applicable, whenever possible, who should decide the positioning of the stabiliser when being loaded by a tanker/silo?
Who should determine the maximum load that is to be placed into the hopper?
Name at least THREE specific items of personal protection would be required if loading the hopper using a pressurised system.
What is the purpose of the air vent valve on the hopper?
How are stones or other material prevented from flying out during incorporation?
How is the depth of work controlled on a) self-propelled units and b) on towed units?

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Soil Stabilisers A71
Technical Test Theory Questions

Name FOUR way that the body can be affected if coming into contact with lime or cement.
State FOUR checks that needs to be made to machine before loading any binding material.
When working in a restricted area or space, name TWO hazards that can occur.
a) What is the recommended minimum distance to be kept away from overhead power lines mounted on wooden poles when working and b) explain why a distance should be kept?
What is the purpose of a stop block or earth bank (berm) at a trench/batter?
What is the meaning of this hand signal (being demonstrated by the Tester)?
Name TWO types of binding material that is used in the soil stabilisation process?
What THREE factors determine the effectiveness of incorporating a binding material into soils?
What TWO factors determine a consistent spread of the binding material along each pass?
What could be the results of poor incorporation?
Describe the aims of mixing a binding material into soil.
High winds can cause what THREE effects on the incorporation process?
Before leaving the cab for a rest break, after parking and switching off the machine, what final action must be carried out?
Why should the parking brake be fully applied when parking, and not just be left in gear?
Before attempting to clear the mixing/rotor area of excess material, what is the first action that must be undertaken?
List THREE items be looked for when carrying out post-operational checks on stabilisers.

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Soil Stabilisers A71
Technical Test Theory Questions

If washing down a machine following work a) what should be taken into account with the washing residue and b) why?
If mixing a material in which water was added through the machine, what needs to be done at the end of the shift?
When parking the machine at the end of the shift, name THREE places where the stabiliser or spreader should NOT be parked.
Larger soil stabilisers or tractor-based spreaders tend to have a turbo-charged engine. a) What is the normal procedure before switching off the engine after working and b) what happens if the procedure is not followed?
Why should a soil stabiliser or spreader be re-fuelled at the end of the day?
The operator has been asked to drive the machine onto a transporter/trailer. a) Who is responsible for the loading operations and b) state FOUR actions to be considered by the operator before loading commences?

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Stationary Concrete Placing Boom A72
Technical Test Theory Questions

What is the definition of, or how can a hazard be described?
What is the purpose of a risk assessment?
List SIX typical subject areas that should be covered in a site induction.
What THREE main duties of The Health and Safety at Work Act must employees follow?
What does The Health and Safety at Work Act require employers to do with regards specifically to plant?
a) What is the purpose of a Method Statement and b) what is required of the operator?
Name FOUR different types or levels of sanctions that can be applied (by employers and judicial bodies) to plant operators who do not comply with, or follow legislation and regulations?
Placing boom operators are generally regarded as ‘safety-critical’ workers. What does this mean?
Name THREE ways in which an operator can minimise their impact upon the environment whilst using the boom.
What effect does wet concrete have if it comes into contact with the skin, particularly over long periods of exposure?
The operator has to use a new type of boom that they are unfamiliar with. What do Regulations (i.e. PUWER 98) and other guidance require the operator to have?
What are the possible outcomes if being prosecuted for not complying with legislation and regulations?
How can a qualification or card benefit a placing boom operator?
Name THREE ways that a placing boom operator can contribute in ensuring repeat business with the client or principal contractor.
Where should the User’s Manual be kept and why?
What are the THREE actions or stages that a placing boom operator undertakes during pre-use inspections?

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Stationary Concrete Placing Boom A72
Technical Test Theory Questions

Using the Operator's Manual, state the required length of the delivery hose.
Using the Operator's Manual, what is the maximum wind speed allowed for operations before shut-down has to occur?
If topping up the hydraulic tank with oil, why must gloves be worn?
Apart from the operator, who else may need to use the machine's User's Manual?
What specific checks should be made to the quick release couplings before and during pumping operations?
What is the purpose of the blanking piece?
What are the main component parts of a concrete mix?
a) Where would a single ended flex be used and b) why is it used?
Which two parts of the boom is the operating radius measured from?
Name THREE checks that must be made on the pipeline from the pump to the placing boom before use.
Why must the thickness of steel pipelines be checked on a regular basis?
What checks need to be made to ensure that the boom structure is stable before work starts?
If the pedestal area needs to be accessed before, during or after work, what precautions need to be taken?
If setting up to pour concrete adjacent to a pedestrianised area, state THREE factors that need to be taken into account.
What is the purpose of pumping grout through the pipeline?
When setting up to work, what should be taken into account when near to tower cranes?

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Stationary Concrete Placing Boom A72 Technical Test Theory Questions

If pipelines have to be connected to scaffolding, what TWO factors must be ensured?
What ways should a pipeline be secured to a building/structure in both a) the vertical and b) the horizontal planes?
Why are pipelines of different diameters used?
When attaching the placement hose to the boom, what TWO additional items must be fitted?
If the boom is to be operated from a fixed operating station/position, what should be ensured for the safety of the operator?
What checks should be made to the couplers?
What checks should be made to the transmitter of a remote-controlled boom before work?
Before the start of work, a) how should any signallers be identified and b) what should be agreed between the boom operator and a signaller?
Before actually pouring any concrete, what action should the operator take to ensure the safety of concrete laying gang/team?
What THREE instances occur if the placement hose is longer than specified?
a) What is the recommended minimum distance to be kept away from overhead power lines mounted on steel pylons when setting up the boom and/or pipe work and b) explain why a distance should be kept?
Give THREE reasons on why the placing hose should not be tied together or folded back on itself?
If radios are to be used during a pumping operation, what FIVE actions and checks must be made by the placing boom operator before use?
When repositioning the boom to a different location during the pour, what action should be taken with the flexible hose?
During the pumping of material, part of the task cannot be carried out as detailed in the method statement. a) What initially must happen to the operation and b) who authorises any changes?
Describe at least THREE causes of blockages that may occur within the pipeline.

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Stationary Concrete Placing Boom A72
Technical Test Theory Questions

If using a remote control, what action should the operator take if they need to leave the operating station during pumping?
When working in a restricted area/space, name THREE dangers that can be present.
What is considered as the danger zone around the placement hose?
If the words STOP NOW are given to the boom operator by radio during the pumping operation, what action must the operator take?
a) If a blockage occurs, what first action must be taken by the operator and b) what must be actioned before the blockage can be cleared?
What is the meaning of this hand signal (being demonstrated by the Tester)?
What FOUR actions should be taken if a hydraulic hose bursts during work?
When slewing the boom or changing the working different radius during pumping, what should be checked in relation to the hose?
When pumping in hot weather, what should the operator need to take into account?
What TWO effects can high wind speeds have on placing boom operations?
a) What additional items (over and above standard site wear) of PPE are required when cleaning out the pipeline and b) and what characteristics must the PPE have?
How should the placing boom be positioned following the end of the pour?
What action should be taken at the end of the pour in relation to the remote control unit?
Before cleaning with water or compressed air, what should be removed from the boom?
Apart from water, what other supervised method can be used to clean out pipelines?
a) What is considered the safest method of cleaning the system and b) explain why?

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Stationary Concrete Placing Boom A72 Technical Test Theory Questions

Where must waste from the cleaning process not be deposited or kept clear off?
If, as a last resort, using compressed air to clean the system, what must be ensured of the operator?

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a) Give ONE advantage of using cameras to monitor the work. b) Give TWO disadvantages of using cameras to monitor the work.
In demolition operations how is silica dust created or formed?
a) What is the purpose of a Method Statement. b) What is required of the operator?
a) What is the recommended minimum distance to be kept away from overhead power lines mounted on wooden poles when setting up the machine? b) Explain why a distance should be kept.
a) Why should the slewing direction be to the left wherever possible? b) Explain why.
Apart from the operator, who else may need to use the machine's Operator's Manual?
Before leaving the cab for a rest break, after parking and switching off the machine, what final action must be carried out?
Before manually changing any attachment: a) Where should the attachment be positioned (in relation to the ground) before removing the final pin? b) Explain why.
Before starting work on a new structure, how should the operator familiarise themselves with the work zone?
Cable avoidance tools (CATs) can detect a variety of buried services. What type of material do they have limitations in locating?
When disconnecting the hydraulic hoses to change an attachment, what method should be used to ensure they are not mixed up when reconnected?
a) How many types of asbestos may be commonly found in the work place? b) Name the colours.
Describe ONE physical method of checking that an attachment is fully secured to the quick-hitch coupler prior to work.
During work, the engine starts to overheat. Explain the danger if someone tries to remove the radiator or expansion tank cap.
Explain a possible danger if the machine is demolishing on sloping ground.

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Demolition Plant D90
Technical Test Theory Questions

a) How does silica dust harm the body b) What symptoms can result from exposure?
Explain ALL visual checks that must be carried out on all types of quick-hitch attachment connecting systems before use.
Explain the difference between pre-tensioned and post-tensioned members.
Give FOUR reasons that may cause the machine to tip over – forwards and/or sideways.
Give TWO examples of where The Work at Height Regulations may apply to demolition machine operations.
How can a qualification or card benefit a plant operator?
If a trench has a depth of 2 metres: a) What is the minimum distance to maintain from the edge of the trench when working? b) Explain why.
If both travel levers (or travel pedal for wheeled machines) are pushed forwards when the track motors (or driving wheels) are in front of the cab, in which direction would the machine move?
If checking the oil level using a dipstick, why must gloves be worn?
If loading a vehicle with material, in what circumstances can the truck/wagon driver remain in the cab?
If setting up to demolish in a confined area, name TWO things that should be taken into account before starting.
If setting up to work close to a pedestrianised area, state THREE factors that need to be taken into account.
If the machine is crossing the public highway, the Road Traffic Act applies. a) What type of licence and which classes should the operator hold b) What is the minimum age allowed?
If the operator has loaded the machine onto a transporter/trailer on behalf of a driver, what checks must be carried out before they leave the cab?
If the operator has to top up the hydraulic oil, state TWO precautions to ensure cleanliness of the system.

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Demolition Plant D90
Technical Test Theory Questions

If the structure being demolished has a basement, name two precautions to be taken to ensure the integrity of the floor slab.
In what situation does a hard hat NOT need to be worn when operating a demolition machine?
List SIX typical subject areas that should be covered in a site induction.
Larger demolition machines are fitted with a turbo-charged engine. a) What is the normal procedure before switching off the engine after working b) What happens if the procedure is not followed?
Name FOUR different types or levels of disciplinary actions or sanctions that can be applied (by employers and judicial bodies) to operators of plant who do not comply with, or follow legislation and regulations.
Name FOUR hydraulically operated attachments that may be used on demolition.
Name FOUR load-bearing structural elements.
Name THREE ways in which an operator can minimise their impact upon the environment whilst using the machine.
Name THREE ways that a plant operator can contribute in ensuring repeat business with the client or main contractor.
On a semi-automatic quick-hitch attaching system: a) What is the purpose of the safety pin b) What checks MUST be made to the pin before use?
On high-reach machines, what should be considered when positioning the machine for work?
On many demolition machines, the slew is restricted. a) What is the normal position for working? b) Explain why the slew restricted.
a) What must be undertaken as the first step when disconnecting a hydraulic line, b) Where can the specific information be found?
When removing and handling asbestos cement sheets, what is the minimum PPE and RPE that should be worn?
State the purpose of the check valve(s) located on the boom cylinder rams.

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Demolition Plant D90
Technical Test Theory Questions

The operator has been asked to drive the machine onto a transporter/trailer. a) Who is responsible for the loading operations? b) State FOUR actions to be considered by the operator before loading commences.
The operator has to fit and use a new attachment using a quick-hitch coupler that they are unfamiliar with. What do Regulations (i.e. PUWER 98) and other guidance require the operator to have?
The operator is asked to demolish a new structure. State FIVE different requirements that must be considered or implemented before work commences.
The operator must be aware at all times of the operation of the attachment, and of the progress of the demolition. Give THREE examples on how they would achieve this.
There are five designated areas within a demolition site. Name THREE of those areas.
Using the Operator's Manual, state the cold-starting procedure for the machine. **Note:** The Operator's Manual for the machine being used for the test MUST be available for reference by the candidate.
Using the Operator's Manual, state the figure for setting track tension. **Note:** The Operator's Manual for the machine being used for the test MUST be available for reference by the candidate.
What actions should be taken to a partially demolished structure at the end of a working day?
What are the possible outcomes of facing prosecution for not complying with legislation and regulations?
Describe how exposure to asbestos fibres can cause health issues.
What are the requirements for creating a raised working platform?
What does the Health and Safety at Work Act require employers to do with regards specifically to plant?
What is the definition of, or how can a hazard be described?
What is the purpose of a risk assessment?
What is the difference between a ROPS and FOPS structure?
What is the purpose of the counterweight of the machine?
Chrysotile or white asbestos is known to be 'hydrophilic' or easily mixed with water. Therefore, what is the best control measure against fibres spreading during demolition operations?

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Demolition Plant D90
Technical Test Theory Questions

What particular and specific hazards can affect the stability of the machine when working on old industrial (brownfield) sites?
What THREE main duties of the Health and Safety at Work Act must employees follow?
When MUST a banksman/signaller be used before moving the machine?
When parking the machine at the end of the shift, name THREE places where the machine should NOT be parked.
If using a high-reach machine, describe FOUR considerations that must be taken into account when setting up for work.
When working in a confined area or space: a) What danger can be present with regards to the counterweight of the machine b) When should measures be taken c) What measures should be implemented?
Where should the machine's Operator's Manual be kept and why?
Why are demolition plant operators generally regarded as 'safety-critical' workers?
If previously undetected asbestos is exposed when taking down a section of a building, what sequence of actions must be taken?
Why must the seat belt be worn, even with the cab door closed?
Why should a machine be re-fuelled at the end of the day?
Why should different materials be segregated during demolishing?
Why should linkage pins be checked on a regular basis?
What could cause the hydraulic system to overheat?
Why should the jaws of a shear be kept downwards if working at height?

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Demolition Plant
Pedestrian Operated D91
Technical Test Theory Questions

What is the definition of, or how can a hazard be described?
What is the purpose of a risk assessment?
List SIX typical subject areas that should be covered in a site induction.
What THREE main duties of the Health and Safety at Work Act must employees follow?
What does the Health and Safety at Work Act require employers to do with regards specifically to plant?
a) What is the purpose of a Method Statement and b) what is required of the operator?
Name FOUR different types or levels of sanctions that can be applied (by employers and judicial bodies) to plant operators who do not comply with, or follow legislation and regulations.
Demolition plant operators are generally regarded as ‘safety-critical’ workers. What does this mean?
Name THREE ways in which an operator can minimise their impact upon the environment whilst using the machine.
How can a qualification or card benefit a plant operator?
What are the possible outcomes if being prosecuted (by judicial bodies) for not complying with legislation and regulations?
The operator has to fit and use a new attachment using a quick-hitch coupler that they are unfamiliar with. What do Regulations (i.e. PUWER 98) and other guidance require the operator to have?
Name THREE ways that a demolition machine operator can contribute in ensuring repeat business with the client or main contractor.
Where should the machine’s Operator’s Manual be kept and why?
If the operator has to top-up the hydraulic oil, state TWO precautions to ensure cleanliness of the system.

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Demolition Plant
Pedestrian Operated D91
Technical Test Theory Questions

Using the Operator's Manual, state the quoted operating voltage and amperage.
Using the Operator's Manual, state the figure that determines what the track tension should be.
If fitted, state the purpose of the check valve(s) located on the boom cylinder ram.
What does this symbol (being shown by the tester) indicate?
If topping up the hydraulic oil, why must gloves be worn?
Name THREE hydraulically operated attachments that may be used on pedestrian-operated demolition plant.
Name at least THREE electrical items that should be ensured and checked before turning on and/or operating the machine.
Why must an unqualified person not open an electric cabinet?
What would provide an indication if the phase has been wired in the incorrect sequence?
Apart from the operator, who else may need to use the machine's Operator's Manual?
On some pedestrian-operated types, the slew is restricted. a) What is the normal position for working and b) why is the slew restricted?
Explain ALL visual checks that must be carried out on all types of quick-hitch attachment connecting systems before use.
When working the machine at height, describe FOUR considerations that must be taken into account when setting up for work.
Give THREE examples of safety precautions that must be taken when lifting the machine into the work position.
Who and what determines the required length of cable between the supply socket and the machine?

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Demolition Plant
Pedestrian Operated D91
Technical Test Theory Questions

If the machine is to work a considerable distance away from the power supply, what precautions need to be taken with regards to the cable?
When establishing, or when seeking a suitable power supply, what needs to be checked?
a) Who determines the point loadings exerted by the stabilisers of the machine and b) why is this information needed?
Give FOUR reasons that may cause the machine to tip over – forwards and/or sideways.
When tracking the machine to the work area, what should be taken into account during travel?
What is the purpose of counterweighting the machine?
If a trench has a depth of 1.0 metre: a) what is the minimum distance to maintain from the edge of the trench when travelling and b) explain why?
On types fitted with stabilisers, what additional issue should be considered when positioning the machine for work?
Describe ONE physical method of checking that an attachment is fully secured to the quick-hitch coupler prior to work.
What is considered as the safe working position and configuration for the machine?
When working in a confined area or space: a) what danger can be present with regards to the counterweight of the machine, b) when should measures be taken and c) what measures must be implemented?
If setting up to demolish in a confined area, name THREE things that should be taken into account before starting.
If setting up to work close to a pedestrianised area, state THREE factors that need to be taken into account.
The operator is asked to work on a new project. State FIVE different requirements that must be considered or implemented before work commences.
Before starting work on a new project, how should the operator familiarise themselves with the work zone?

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Demolition Plant
Pedestrian Operated D91
Technical Test Theory Questions

a) What is the recommended minimum distance to be kept away from overhead power lines mounted on wooden poles when setting up the machine and b) explain why a distance should be kept.
If two or more radio-remote controlled machines e.g. a crane or robotic crusher/breaker are on the site and both in operation, state TWO checks that should be undertaken that ensures that transmitting radio signals are not on the same frequency?
What additional requirements should be employed to prevent the machine from moving if working near to an edge?
Why should different materials be segregated during demolishing?
What are the requirements for creating a raised working platform?
If the structure being demolished has a basement, name two precautions to be taken to ensure the integrity of the floor slab.
Name at least FIVE dangers that could be encountered in a structure being demolishing?
Before manually changing any attachment: a) where should the attachment be positioned (in relation to the ground) before removing the final pin and b) why?
When disconnecting the hydraulic hoses to change an attachment, what method should be used to ensure they are not mixed up when reconnected?
a) What must be undertaken as the first step when disconnecting a hydraulic line, and b) where can the specific information be found?
Explain the difference between pre-tensioned and post-tensioned members.
Name FOUR load bearing structural elements.
a) Name TWO methods of controlling dust during demolition and b) what precaution needs to be taken?
Why should linkage pins be checked on a regular basis?
A section of the structure is to be retained, what operation should have been carried out prior to commencing demolition of the remaining part?
Explain a possible danger if the machine is demolishing on sloping ground.
Why should demolition arising's be regularly removed during work?
If operating a machine on a floor with an open edge, why should a radio-operated remote control be used and not an umbilical type?

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Demolition Plant
Pedestrian Operated D91
Technical Test Theory Questions

What could cause the hydraulic system to overheat?
What actions should be taken to a partially demolished structure at the end of a working day?
When parking the machine at the end of the shift, name THREE places where the machine should NOT be parked.
The operator is manoeuvring the machine onto a transporter/trailer, state FIVE actions to be considered before loading commences.
When the machine is loaded onto a transporter/trailer, what THREE checks must be carried out before transporting?
a) When should post-operational checks need to be carried out and b) what two actions should be taken if defects are found?
a) How does silica dust harm the body and b) What symptoms can result from exposure?
When removing and handling asbestos cement sheets, what is the minimum PPE and RPE that should be worn?
Chrysotile or white asbestos is known to be 'hydrophilic' or easily mixed with water. Therefore, what is the best control measure against fibres spreading during demolition operations?
In demolition operations how is silica dust created or formed?
a) How many types of asbestos may be commonly found in the work place? and b) name the colours.

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Demolition Plant
Skid Steer Tool Carrier D92
Technical Test Theory Questions

What is the definition of, or how can a hazard be described?
What is the purpose of a risk assessment?
List SIX typical subject areas that should be covered in a site induction.
What THREE main duties of The Health and Safety at Work Act must employees follow?
What does The Health and Safety at Work Act require employers to do with regards specifically to plant?
a) What is the purpose of a Method Statement b) What is required of the operator?
Name FOUR different types or levels of sanctions that can be applied (by employers and judicial bodies) to plant operators who do not comply with, or follow legislation and regulations.
Demolition plant operators are generally regarded as 'safety-critical' workers. What does this mean?
Name THREE ways in which an operator can minimise their impact upon the environment whilst using the machine.
The operator has to fit and use a new attachment using a quick-hitch coupler that they are unfamiliar with. What do Regulations (i.e. PUWER 98) and other guidance require the operator to have?
What are the possible outcomes if being prosecuted (by judicial bodies) for not complying with legislation and regulations?
How can a qualification or card benefit a plant operator?
Name THREE ways that a demolition plant operator can contribute in ensuring repeat business with the client or main contractor.
Where should the Operator's Manual be kept and why?
Name THREE attachments that are available for a skid steer used within the demolition sector.

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Demolition Plant
Skid Steer Tool Carrier D92
Technical Test Theory Questions

If the operator has to top-up the hydraulic oil, state TWO precautions to ensure cleanliness of the system.
Using the Operator's Manual, state the figure for the torque setting for the wheel securing nuts/bolts.
Using the Operator's Manual, state the cold-starting procedure for the machine.
Describe briefly how a (wheeled) skid steer 'steers' or changes direction.
If checking the oil level using a dipstick, why must gloves be worn?
How are skid steer bucket sizes calculated?
On pneumatic tyre equipped machines, what is a possible consequence of using a tyre with a deep cut in the sidewall?
Apart from the operator, who else may need to use the machine's Operator's Manual?
How or what counterweights the machine from the effects of a loaded bucket?
During work, the engine starts to overheat. Explain the danger if someone tries to remove the radiator or expansion tank cap.
Why should a skid steer not be travelled if there is no attachment/bucket fitted to the loader arms?
How can a skid steer turn around within its own area?
Name THREE conditions that mirrors must be in, on the machine.
Why must the seat belt be worn, even within the confines of the cab?
What problems and hazards can soft ground cause to a loaded skid steer?

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Demolition Plant
Skid Steer Tool Carrier D92
Technical Test Theory Questions

a) Name THREE purposes of the raised lugs on tyres. b) What can happen to a skid steer if the lugs are severely worn?
When travelling on wet dust, what effect does this have on the skid steer?
Give FOUR reasons that may cause the skid steer to tip over sideways.
Explain ALL visual checks that must be carried out on all types of quick-hitch bucket attaching systems before use.
On a semi-automatic quick-hitch bucket attaching system: a) What is the purpose of the safety pin b) What checks MUST be made to the pin before use?
Describe ONE physical method of checking that the attachment is fully secured to the coupler prior to work.
If setting up to work near to a pedestrianised area, state THREE factors that need to be taken into account.
What is regarded as the most productive position for the receptacle to be loaded to be in when being loaded by a skid steer working from a stockpile?
Before manually changing any bucket: a) Where should the bucket be positioned (in relation to the ground) before unlatching? b) Explain why.
Give TWO reasons why the skid steer operator should have an understanding of the type of material being loaded.
When working in a confined area or space: a) What danger can be present with regards to the rear of the machine b) What is the recommended minimum distance c) What measures must be implemented if the gap is less?
The operator is asked to tip material into a chute or drop shaft. State FIVE different requirements that must be considered or implemented before tipping commences.
On non-self levelling buckets, what problem can occur if a fully loaded bucket is raised to full height?
What may happen if the load is tipped downhill on a slope and why?

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Demolition Plant
Skid Steer Tool Carrier D92
Technical Test Theory Questions

When working in a confined area or space, name THREE hazards that can occur.
a) What is the recommended minimum distance to be kept away from overhead power lines mounted on wooden poles when tipping loads? b) Explain why a distance should be kept.
State TWO requirements of using a stop block or earth bank (berm) at a trench discharging point.
When constructing a ramp, name THREE considerations to take into account.
If access or egress to/from the cab has to be via the front of the machine, state two precautions to be observed before exiting the machine.
Before leaving the cab for a rest break, after parking and switching off the machine, what final action must be carried out?
When parking the machine at the end of the shift, name THREE places where the machine should NOT be parked.
The operator has been asked to drive the machine onto a transporter/trailer: a) Who is responsible for the loading operations? b) state FOUR actions to be considered by the operator before loading commences.
If the operator has loaded the machine onto a transporter/trailer on behalf of a driver, what checks must be carried out before they leave the cab?
Why should a skid steer be re-fuelled at the end of the day?
When working the machine at height, describe FOUR considerations that must be taken into account when setting up for work.
If setting up to demolish in a confined area, name THREE things that should be taken into account before starting.
The operator is asked to work on a new project. State FIVE different requirements that must be considered or implemented before work commences.
Before starting work on a new project, how should the operator familiarise themselves with the work zone?
What additional requirements should be employed at height or on multi-floor buildings to prevent the machine from moving if working near to an edge?
If the structure being demolished is a multi-floor structure, name two precautions to be taken to ensure the integrity of the floor slab.

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CP CONSTRUCTION PLANT
CS COMPETENCE SCHEME

Demolition Plant
Skid Steer Tool Carrier D92
Technical Test Theory Questions

Name at least FIVE dangers that could be encountered in a structure being demolishing.
a) What must be undertaken as the first step when disconnecting a hydraulic line b) Where can the specific information be found?
Name FOUR load bearing structural elements.
a) Name TWO methods of controlling dust during demolition. b) What precaution needs to be taken?
Why should demolition arising's be regularly removed during work?
What actions should be taken to a partially demolished structure at the end of a working day?
There are five areas within a demolition site. Name THREE of those areas.
What is the difference between a ROPS and a FOPS structure?
Why should different materials be segregated during demolishing?
What are the requirements for creating a raised working platform?
Describe how exposure to asbestos fibres can cause health issues.
If previously undetected asbestos is exposed when taking down a section of a building, what sequence of actions must be taken?
Chrysotile or white asbestos is known to be 'hydrophilic' or easily mixed with water. Therefore, what is the best control measure against fibres spreading during demolition operations?
When removing and handling asbestos cement sheets, what is the minimum PPE and RPE that should be worn?
a) How many types of asbestos may be commonly found in the work place? b) Name the colours.
a) How does silica dust harm the body b) What symptoms can result from exposure?
In demolition operations how is silica dust created or formed?

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Technical Test Theory Questions

a) What is the minimum distance allowed near open trenches when travelling with a loaded skid steer?
b) Explain why.

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